217/782-2113

"REVISED"

TITLE V - CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT

and

$TITLE I PERMIT^1$

PERMITTEE

U.S. Silica Company

Attn: Jack Pryor, Corporate EHS Department

701 Boyce Memorial Drive Ottawa, Illinois 61350

Application No.: 95060046 I.D. No.: 099825AAA

Applicant's Designation: Date Received: June 7, 1995

Operation of: Industrial Silica Products

Date Issued: October 29, 2003 Expiration Date²: October 29, 2008

Source Location: 701 Boyce Memorial Drive, Ottawa, Illinois

Responsible Official: Daniel N. Gerber/Plant Manager

This permit is hereby granted to the above-designated Permittee to OPERATE a Sand Processing Plant, pursuant to the above referenced permit application. This permit is subject to the conditions contained herein.

Revision Date Received: June 8, 2004

Revision Date Issued:

Purpose of Revision: Minor Modification

This minor modification replaces product transfer equipment with similar but improved equipment that does not increase emissions or permitted product throughput.

This document only contains those portions of the entire CAAPP permit that have been revised as a result of this permitting action. If a conflict exists between this document and previous versions of the CAAPP permit, this document supercedes those terms and conditions of the permit for which the conflict exists. The previous permit issued October 29, 2003 is incorporated herein by reference. Please attach a copy of this amendment and the following revised pages to the front of the most recently issued entire permit.

If you have any questions concerning this permit, please contact Jack Yates at 217/782-2113.

Donald E. Sutton, P.E. Manager, Permit Section Division of Air Pollution Control

DES:JMY:psj

cc: Illinois EPA, FOS, Region 2

- This permit may contain terms and conditions which address the applicability, and compliance if determined applicable, of Title I of the CAA and regulations promulgated thereunder, including 40 CFR 52.21 federal PSD and 35 IAC Part 203 Major Stationary Sources Construction and Modification. Any such terms and conditions are identified within this permit.
- 2 Except as provided in Condition 8.7 of this permit.

TABLE OF CONTENTS

			PAGE
1.0	SOURC	E IDENTIFICATION	4
	1.2 1.3	Source Owner/Parent Company Operator General Source Description	
2.0	LIST	OF ABBREVIATIONS/ACRONYMS USED IN THIS PERMIT	6
3.0	INSIG	NIFICANT ACTIVITIES	7
	3.1 3.2 3.3	Compliance with Applicable Requirements	
4.0	SIGNI	FICANT EMISSION UNITS AT THIS SOURCE	9
5.0	OVERA	ALL SOURCE CONDITIONS	14
	5.1 5.2 5.3 5.4 5.5 5.6 5.7 5.8	Applicable Regulations Non-Applicability of Regulations of Concern Source-Wide Operational and Production Limits and Work Practices Source-Wide Emission Limitations General Recordkeeping Requirements	
6.0		IONS REDUCTION MARKET SYSTEM (ERMS) APPLICABLE TO THIS PERMIT]	20
7.0	UNIT	SPECIFIC CONDITIONS	21
	7.1 7.2 7.3 7.4	Unit 1: Three Fluidized Bed Dryers Control 1: Three Riley Venturi Rod Scrubbers Unit 2: 218 Process Emission Units and Process Building Fugitives Control 2: Ten Baghouses Unit 3: One 1,000 gallon gasoline storage tank Control 3: Submerged Loading Pipe Unit 4: Fugitive Particulate Matter Control 4: Fugitive Dust Operating Program	
8.0	GENER	CAL PERMIT CONDITIONS	57
J. 0	8.1 8.2	Permit Shield Applicability of Title IV Requirements	JI

			PAGE
	8.3 8.4 8.5	Emissions Trading Programs Operational Flexibility/Anticipated Operating Scenarios Testing Procedures	
	8.6 8.7	Reporting Requirements Obligation to Comply with Title I Requirements	
9.0	STAND	ARD PERMIT CONDITIONS	62
	9.1	Effect of Permit	
	9.2	General Obligations of Permittee	
	9.3	Obligation to Allow Illinois EPA Surveillance	
	9.4	Obligation to Comply with Other Requirements	
	9.5	Liability	
	9.6	Recordkeeping	
	9.7	Annual Emissions Report	
	9.8	Requirements for Compliance Certification	
	9.9	Certification	
		Defense to Enforcement Actions	
		Permanent Shutdown	
		Reopening and Reissuing Permit for Cause	
		Severability Clause	
	9.14	Permit Expiration and Renewal	
10.0	ATTAC	HMENTS	
	10.1	Attachment 1 - Example Certification by a Responsible Official	1-1
	10.2	Attachment 2 - Guidance on Revising This Permit	2-1
		Attachment 3 - Form 199-CAAPP, Application For Construction Permit (For CAAPP Sources Only)	3-1
	10.4	Attachment 4 - Guidance on Renewing This Permit	4-1

1.0 SOURCE IDENTIFICATION

1.1 Source

U.S. Silica Co. 701 Boyce Memorial Drive Ottawa, Illinois 61350 815/434-0188

I.D. No.: 099 825 AAA
Standard Industrial Classification: 1446, Mining and Quarrying of
Nonmetallic Minerals

1.2 Owner/Parent Company

BMAC Services Co., Inc. P.O. Box 187 Berkeley Springs, West Virginia 25411

1.3 Operator

U.S. Silica Co. 701 Boyce Memorial Drive Ottawa, Illinois 61350

Jack Pryor/Environmental Engineer 304/258-2500 x8250

1.4 General Source Description

The U.S. Silica Company (US Silica) Ottawa plant is located in Ottawa Township, LaSalle County, bordering the west side of the city of Ottawa, Illinois. The Ottawa plant was formerly the Ottawa Division of Ottawa Silica Company, which was founded in 1900. The company was started with the acquisition of 39 acres of silica-bearing land and over the years has grown to over 1000 acres in the surrounding area.

The deposit mined at the Ottawa facility is commonly known as the St. Peter Sandstone. Locally, the formation has a thickness of about 200 feet. Grain size distribution is very uniform and ranges from medium to medium-course grained in the upper, and medium to fine grained in the lower sections.

One of the primary uses for silica sand is in the manufacture of glass, however no glass is manufactured at the Ottawa plant.

Sandstone is blasted with conventional explosives and detonators. The blasted sandstone, being very friable, breaks into loose individual sand grains and is washed into a sump formed in the pit floor. Slurried sand is transported to a screening pit where contaminants and larger material are removed. The slurry is pumped to the plant for processing.

The sand is filtered, sized and dewatered before entering one of three fluidized bed dryers. The dryers in the Ottawa plant each have fluidized inlet blowers injecting hot air from below, which places the sand in suspension as it dries. The annual total drying capacity is nearly 4,000,000 tons per year. Riley venturi rod scrubbers are used for control of particulate and PM10 emissions from the dryers. The dry fine sand is conveyed and elevated to either the fine Sand plant or the Sizing building.

The main portion of the dried fine sand is conveyed for air sizing at Mill D sizing. Each air sizer has fans which blow a stream of air horizontally across the sand as it drops in the sizing chamber. The course sand due to its mass will fall into the nearest slot. The finer the sand, the farther it is carried by the air stream. The sorted sands are stored in bins under which conveyors transport it to the bagging area, to the trucking area or to the rail loading area.

After screening and mixing operations, the coarse sand in Bin 1 is made into four graded products, which meet American Society for Testing and Materials (ASTM) standards. These ASTM sands are bagged for sale and distribution.

The coarse sand in Bins 2-6 is the source of raw sand for the Silica Mill (Mill G). Once at Mill G, the raw sand is elevated and placed in one of two raw sand storage bins. The two bins feed, by gravity, the mills wherein the sand is ground to a finer particle size. The ground sand is processed by air classifiers. The classifiers use an air stream to grade the ground sand. The acceptable silica flour is sent to storage while the coarser material is returned to milling.

The Ottawa facility operates 24 hours per day, 7 days per week and 52 weeks per year.

2.0 LIST OF ABBREVIATIONS/ACRONYMS USED IN THIS PERMIT

Act	Illinois Environmental Protection Act [415 ILCS 5/1 et seq.]	
AP-42	Compilation of Air Pollutant Emission Factors, Volume 1,	
	Stationary Point and Other Sources (and Supplements A	
	through F), USEPA, Office of Air Quality Planning and	
	Standards, Research Triangle Park, NC 27711	
Btu	British thermal unit	
CAA	Clean Air Act [42 U.S.C. Section 7401 et seq.]	
CAAPP	Clean Air Act Permit Program	
CAM	Compliance Assurance Monitoring	
CFR	Code of Federal Regulations	
ERMS	Emissions Reduction Market System	
HAP	Hazardous Air Pollutant	
hr	Hour	
IAC	Illinois Administrative Code	
I.D. No.	Identification Number of Source, assigned by Illinois EPA	
ILCS	Illinois Compiled Statutes	
Illinois EPA	Illinois Environmental Protection Agency	
kW	Kilowatts	
lb	Pound	
mmBtu	Million British thermal units	
NESHAP	National Emission Standards for Hazardous Air Pollutants	
NO_x	Nitrogen Oxides	
NSPS	New Source Performance Standards	
PM	Particulate Matter	
PM ₁₀	Particulate matter with an aerodynamic diameter less than or	
	equal to a nominal 10 microns as measured by applicable test	
	or monitoring methods	
ppm	parts per million	
PSD	Prevention of Significant Deterioration	
RMP	Risk Management Plan	
SO ₂	Sulfur Dioxide	
T1	Title I - identifies Title I conditions that have been	
	carried over from an existing permit	
T1N	Title I New - identifies Title I conditions that are being	
	established in this permit	
T1R	Title I Revised - identifies Title I conditions that have	
	been carried over from an existing permit and subsequently	
	revised in this permit	
USEPA	United States Environmental Protection Agency	
VOM	Volatile Organic Material	

3.0 INSIGNIFICANT ACTIVITIES

3.1 Identification of Insignificant Activities

The following activities at the source constitute insignificant activities as specified in 35 IAC 201.210:

3.1.1 Activities determined by the Illinois EPA to be insignificant activities, pursuant to 35 IAC 201.210(a)(1) and 201.211, as follows:

None

3.1.2 Activities that are insignificant activities based upon maximum emissions, pursuant to 35 IAC 201.210(a)(2) or (a)(3), as follows:

None

3.1.3 Activities that are insignificant activities based upon their type or character, pursuant to 35 IAC 201.210(a)(4) through (18), as follows:

Direct combustion units designed and used for comfort heating purposes and fuel combustion emission units as follows: (A) Units with a rated heat input capacity of less than 2.5 mmBtu/hr that fire only natural gas, propane, or liquefied petroleum gas; (B) Units with a rated heat input capacity of less than 1.0 mmBtu/hr that fire only oil or oil in combination with only natural gas, propane, or liquefied petroleum gas; and (C) Units with a rated heat input capacity of less than 200,000 Btu/hr which never burn refuse, or treated or chemically contaminated wood [35 IAC 201.210(a)(4)].

Storage tanks of organic liquids with a capacity of less than 10,000 gallons and an annual throughput of less than 100,000 gallons per year, provided the storage tank is not used for the storage of gasoline or any material listed as a HAP pursuant to Section 112(b) of the CAA [35 IAC 201.210(a)(10)].

Storage tanks of any size containing virgin or rerefined distillate oil, hydrocarbon condensate from natural gas pipeline or storage systems, lubricating oil, or residual fuel oils [35 IAC 201.210(a)(11)].

3.1.4 Activities that are considered insignificant activities pursuant to 35 IAC 201.210(b).

3.2 Compliance with Applicable Requirements

Insignificant activities are subject to applicable requirements notwithstanding status as insignificant activities. In particular, in addition to regulations of general applicability, such as 35 IAC 212.301 and 212.123 (Condition 5.2.2), the Permittee shall comply with the following requirements, as applicable:

- 3.2.1 For each cold cleaning degreaser, the Permittee shall comply with the applicable equipment and operating requirements of 35 IAC 215.182, 218.182, or 219.182.
- 3.2.2 For each particulate matter process emission unit, the Permittee shall comply with the applicable particulate matter emission limit of 35 IAC 212.321 or 212.322. For example, the particulate matter emissions from a process emission unit shall not exceed 0.55 pounds per hour if the emission unit's process weight rate is 100 pounds per hour or less, pursuant to 35 IAC 266.110.
- 3.2.3 For each organic material emission unit that uses organic material, e.g., a mixer or printing line, the Permittee shall comply with the applicable VOM emission limit of 35 IAC 215.301, 218.301, or 219.301, which requires that organic material emissions not exceed 8.0 pounds per hour or do not qualify as photochemically reactive material as defined in 35 IAC 211.4690.

3.3 Addition of Insignificant Activities

- 3.3.1 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type that is identified in Condition 3.1, until the renewal application for this permit is submitted, pursuant to 35 IAC 201.212(a).
- 3.3.2 The Permittee must notify the Illinois EPA of any proposed addition of a new insignificant activity of a type addressed by 35 IAC 201.210(a) and 201.211 other than those identified in Condition 3.1, pursuant to Section 39.5(12)(b) of the Act.
- 3.3.3 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type identified in 35 IAC 201.210(b).

4.0 SIGNIFICANT EMISSION UNITS AT THIS SOURCE

Emission		Emission Control	Construction
Unit	Description	Equipment	Date
	Fluidized Bed Dryer	Riley Venturi Rod	Nov 1975
	#1	Scrubber #1	
01	Fluidized Bed Dryer	Riley Venturi Rod	Nov 1975
O I	#2	Scrubber #2	
	Fluidized Bed Dryer	Riley Venturi Rod	Nov 1975
	#3	Scrubber #3	
	Conveyor 4-8A	Baghouse A	Nov, 1975
	Elevator 4-11	Baghouse A	Nov, 1975
	Scalp Screens	Baghouse A	Nov, 1975
	Conveyor 4-12	Baghouse A & B	Nov, 1975
	Elevator 4-14	Baghouse A	Jul, 1980
	6 Course Screens	Baghouse A	Nov, 1993
	6 Course Screens	Baghouse A	Nov, 1993
	Conveyor 4-18A	Baghouse A	Nov, 1993
	Conveyor 4-18B	Baghouse A	Nov, 1993
	Conveyor 4-19A	Baghouse A	Jul, 1980
	Conveyor 4-19B	Baghouse A & B	Jul, 1980
	Feed Hopper A	Baghouse A	Nov, 1993
	Elevator 4-9	Baghouse A	Nov, 1975
	Conveyor 4-10A	Baghouse A	Nov 1975
	Elevator 4-21	Baghouse B	Jul, 1980
	Derrick Screen #1	Baghouse B	Jul, 1980
	Derrick Screen #2	Baghouse B	Jul, 1980
	Derrick Screen #6	Baghouse C	Nov, 1993
	Bin 1 for ASTM	Baghouse C	Nov, 1975
	Elevator 4-12	Baghouse C	Nov, 1975
02	Derrick Screen #3	Baghouse C	Oct, 1988
-	ASTM Bagging	Baghouse D	Aug, 1991
	Bin 2	Baghouse B	Nov, 1975
	Bin 3	Baghouse B	Nov, 1975
	Conveyor I	Baghouse B	Nov, 1975
	Conveyor G	Baghouse F	Nov, 1975
-	Conveyor H	Baghouse G	Apr, 1948
-	Elevator GH	Baghouse F	Apr, 1948
	Conveyor GH	Baghouse F	Sep, 1960
	North Storage Bin	Baghouse F	Nov, 1975
-	South Storage Bin	Baghouse F	Sep, 1960
	Mill "G" Office	Baghouse F	Oct, 1962
	Grind Mill 1	Baghouse G	Apr, 1948
	Grind Mill 2	Baghouse G	Apr, 1948
	Grind Mill 3	Baghouse F	Apr, 1948
	Grind Mill 4	Baghouse F	Apr, 1948
ŀ	Grind Mill 5	None	Apr, 1948
	Grind Mill 6	None	Apr, 1948
	Grind Mill 7	Baghouse G	Sep, 1960
	Grind Mill 9	Baghouse G	May, 1969
ŀ	Airslide V	Baghouse G	Sep, 1960

Emission		Emission Control	Construction
Unit	Description	Equipment	Date
	Airslide W	Baghouse G	Aug, 1991
	Airslide X	Baghouse F	Sep, 1961
	Airslide Y	Baghouse F	Sept, 2004
	Airslide Z	Baghouse F	Sept, 2004
	Airslide A	Baghouse F	Jul, 1989
	Airslide B	Baghouse G	Jul, 1989
	Mill Elevator 15	Baghouse G	Apr, 1948
	Mill Elevator 2	Baghouse G	Apr, 1948
	Mill Elevator 3	Baghouse G	Apr, 1948
	Mill Elevator 46	Baghouse G	Apr, 1948
	Mill Elevator 79	Baghouse F	Apr, 1960
	Classifier Elevator 10	Baghouse F	Apr, 1948
	Classifier Elevator	Baghouse F	Apr, 1948
	Classifier #1	None	Apr, 1948
	Classifier #2	None	Apr, 1948
	Classifier #3	None	Apr, 1948
	Classifier #4	None	Sep, 1960
	3 Hummer Screens	Baghouse G	Mar, 1955
	Storage Elevator 1	Baghouse F	Apr, 1948
	Storage Elevator 2	Baghouse F	Apr, 1948
	Storage Elevator 3	Baghouse F	Apr, 1948
	Storage Elevator 4	Baghouse F	Apr, 1948
02	Storage Elevator 5	Baghouse F	Mar, 1955
(Cont.)	Storage Elevator 6	Baghouse F	Sep, 1960
	Vibrating Screen 1	Baghouse F	Apr, 1948
	Vibrating Screen 2	Baghouse F	Apr, 1948
	Vibrating Screen 3	Baghouse F	Apr, 1948
	Vibrating Screen 4	Baghouse F	Apr, 1948
	Vibrating Screen 5	Baghouse F	Mar, 1955
	Vibrating Screen 6	Baghouse F	Sep, 1960
	Product Flour Bin 1	Baghouse F	Apr, 1948
	Product Flour Bin 2	Baghouse F	Apr, 1948
	Product Flour Bin 3	Baghouse F	Apr, 1948
	Product Flour Bin 4	Baghouse F	Apr, 1948
	Product Flour Bin 5	Baghouse F	Mar, 1955
	Product Flour Bin 6	Baghouse F	Mar, 1955
	Product Flour Bin 7	Baghouse G	Sep, 1958
	Product Flour Bin 8	Baghouse G	Sep, 1958
	Product Flour Bin 9	Baghouse G	Sep, 1958
	Product Flour Bin 10	Baghouse G	Sep, 1958
	Product Flour Bin 11	Baghouse G	Sep, 1958
	Product Flour Bin 12	Baghouse G	Sep, 1958
	Product Flour Bin 13	Baghouse G	Oct, 1959
	Product Flour Bin 14	Baghouse G	Oct, 1959
	Hopper 1	Baghouse G	Apr, 1948
	Hopper 23	Baghouse G	Apr, 1948
	Hopper 4	Baghouse G	Apr, 1948

Emission		Emission Control	Construction
Unit	Description	Equipment	Date
02	Hopper 56	Baghouse G	Mar, 1955
(Cont.)	Bagger 1	Baghouse H	Jul, 1975
	Bagger 23	Baghouse H	Apr, 1948
	Bagger 4	Baghouse H	Apr, 1948
	Bagger 56	Baghouse H	Mar, 1955
	Truck Load C	Baghouse G	Apr, 1991
	Truck Load D	Baghouse G	Apr, 1991
	Rail Load C	Baghouse G	Aug, 1992
	Rail Load D	Baghouse G	Aug, 1992
	Conveyor 5-1A	Baghouse H	Oct, 1990
	Declined Conveyor A	Baghouse H	Oct, 1990
	Conveyor 5-1B	None	Oct, 1990
	Clean Out Bin	Baghouse H	Oct, 1990
	Broken Bag Dumpster	Baghouse H	Oct, 1990
	Palletizer Area	Baghouse H	Oct, 1990
	Conveyor 4-10B	Baghouse B & I	Nov, 1975
	Airslide Z	Baghouse B	Oct, 1990
	#3 Exolon Screens	Baghouse C	Nov, 1975
	Bin 44	Baghouse C	Nov, 1975
	Mixer	Baghouse D	Aug, 1991
	Bagger Clog Product	Baghouse D	Aug, 1991
	Center Distribution	None	Nov, 1975
	Box		
	Conveyor 4-11E	Baghouse B	Nov, 1975
	Conveyor 4-11F	Baghouse C	Nov, 1975
	North Distribution	None	Nov, 1975
	Box		
	South Distribution	None	Nov, 1975
	Box	D 1 D 6 G	T 1 1000
	GKC #1	Baghouse B & C	Jul, 1977
	GKC #2	Baghouse B & C	Jul, 1977
	1 Hummer Screen	Baghouse C	Nov, 1975
	Bin 4A	Baghouse C	Nov, 1975
	Bin 5A	Baghouse C	Nov, 1975
	Bin 6A	Baghouse C	Nov, 1975
	Bin 7A	Baghouse C	Nov, 1975
	Bin 8A Bin 9A	Baghouse B	Nov, 1975
	Bin 9A Bin 10 & 11	Baghouse B	Nov, 1975
	Bin 10 & 11 Bin 12 & 13	Baghouse C	Nov, 1975
	Bin 12 & 13 Bin 14A	Baghouse C	Nov, 1975
	Bin 14A Bin 16A	Baghouse B	Nov, 1975 Nov, 1975
	Elevator 4-13	Baghouse B	Nov, 1973
	Truck Load B	Baghouse B	Jun, 1993
		Baghouse B	<u>'</u>
	GP Conveyor	Baghouse B	Feb, 1995 Feb, 1995
	GP Conveyor	Baghouse B	•
	Derrick Screen #4	Baghouse B	Nov, 1993
	Derrick Screen #5	Baghouse B	Nov, 1993
	GKC #3	Baghouse C	Nov, 1975

Emission		Emission Control	Construction
Unit	Description	Equipment	Date
	5070 Surge Bin	Baghouse E	Nov, 1975
	2 Exolon Screens	Baghouse C	Nov, 1975
02	Bin 20A	Baghouse E	Nov, 1975
(Cont.)	5070 Bagger	Baghouse D	Aug, 1991
	Merrick Conveyor 1	Baghouse B	Nov, 1975
	Merrick Conveyor 2	Baghouse B	Nov, 1975
	Merrick Conveyor 3	Baghouse B	Nov, 1975
	Merrick Conveyor 4	Baghouse B	Nov, 1975
	A Line Blending Belt	Baghouse B, C & D	Nov, 1975
	B Line Blending Belt	Baghouse B, C & D	Nov, 1975
	C Line Blending Belt	Baghouse B, C & D	Nov, 1975
	D Line Blending Belt	Baghouse B, C & D	Nov, 1975
	A Line Elevator	Baghouse B	Nov, 1975
	B Line Elevator	Baghouse B	Nov, 1975
	C Line Elevator	Baghouse C	Nov, 1975
	D Line Elevator	Baghouse C	Nov, 1975
	Conveyor 4-31	Baghouse D	Nov, 1975
	Conveyor 4-32	Baghouse D	Nov, 1975
	Conveyor 4-30A	Baghouse E	Nov, 1975
	Conveyor 4-30B	Baghouse E	Nov, 1975
	Horizontal Track	Baghouse E	Nov, 1975
	Conveyor 4		
	Horizontal Track	Baghouse E	Nov, 1975
	Conveyor 5		
	Inclined Belt	Baghouse E & J	Nov, 1975
	Conveyor 4		
	Inclined Belt	Baghouse E & J	Nov, 1975
	Conveyor 5		
	Track Bin 4	Baghouse J	Nov, 1975
	Track bin 5	Baghouse J	Nov, 1975
	Track 4	Baghouse J	Nov, 1975
	Track 5	Baghouse J	Nov, 1975
	East Bag Bin 1	Baghouse E	Nov, 1975
	East Bag Bin 2	Baghouse E	Nov, 1975
	Pool Sand Bagging	Baghouse E	Mar, 1989
	East Bagging	Baghouse E	Nov, 1975
	Bulk Bag Load	Baghouse E	May, 1987
	Hopper East	Baghouse E	Nov, 1975
	Bin 34A	Baghouse D	Nov, 1975
	Bin 34B	Baghouse D	Nov, 1975
	Truck Load A	Baghouse D	Sep, 1993
	Cooling Bin C & D	Baghouse C	Nov, 1975
	Cooling C & D	Baghouse C	May, 1981
	Conveyor 4-33	Baghouse D	Nov, 1975
	Cooling Elevator C & D	Baghouse C	Nov, 1975
	West Bag Bin 1	Baghouse D	Nov, 1975
	West Bag Bin 2	Baghouse D	Nov, 1975
	West Bagging	Baghouse D	Nov, 1975

Emission		Emission Control	Construction
Unit	Description	Equipment	Date
	Hopper West	Baghouse D	Nov, 1975
	North Outside Bin	Baghouse C	May, 1983
	North Inside Bin	Baghouse C	Feb, 1982
	Bin 35	Baghouse C	Nov, 1975
	South Inside Bin	Baghouse C	Feb, 1982
	South Outside Bin	Baghouse C	May, 1983
	Conveyor AA	Baghouse J	Aug, 1994
	Conveyor BB	Baghouse J	Aug, 1994
	Conveyor CC	Baghouse J	Aug, 1994
	Conveyor DD	Baghouse J	Aug, 1994
	Conveyor EE	Baghouse J	Aug, 1994
	Conveyor FF	Baghouse J	Aug, 1994
	Elevator 4-30	Baghouse I	Jun, 1951
	Bin 17	Baghouse I	Jun, 1951
	Bin 18	Baghouse I	Jun, 1951
	Bin 19	Baghouse I	Jun, 1951
	Bin 20	Baghouse I	Jun, 1951
	Bin 21	Baghouse I	Jun, 1951
	Bin 22	Baghouse I	Jun, 1951
	Bin 23	Baghouse I	Jun, 1951
	Bin 24	Baghouse I	Jun, 1951
	Bin 25	Baghouse I	Jun, 1951
	Bin 26	Baghouse I	Jun, 1951
02	Bin 27	Baghouse I	Jun, 1951
(Cont.)	Bin 28	Baghouse I	Jun, 1951
	Bin 29	Baghouse I	Jun, 1951
	Bin 30	Baghouse I	Jun, 1951
	Bin 31	Baghouse I	Jun, 1951
	Bin 32	Baghouse I	Jun, 1951
	Bin 33	Baghouse I	Jun, 1951
	Feed Hopper F	Baghouse J	Aug, 1994
	Truck Load F	Baghouse J	Aug, 1994
	Rail/Truck Load	Baghouse J	Aug, 1994
	Airslide 9	Baghouse G	Apr, 1967
	Airslide D	None	Apr, 1963
	Airslide E	None	Dec, 1989
	Airslide F	None	Apr, 1963
	Belt Conveyor (4-36)	None	Dec, 1997
	One storage Bin (Bin	None	Dec, 1997
	36)	IVOITE	· · · · · · · · · · · · · · · · · · ·
	One Truck Loadout	None	Dec, 1997
	An elevator	Baghouse I	Jan, 1998
	Two screens	Baghouse I	Jan, 1998
	Building Process Fugitives	None	N/A
03	1,000 gallon Gasoline	Submerged Loading	Unknown
	Storage Tank	Pipe	
04	Fugitive PM Emissions	Fugitive Dust	N/A
		Operating Program	

5.0 OVERALL SOURCE CONDITIONS

5.1 Source Description

- 5.1.1 This permit is issued based on the source requiring a CAAPP permit as a major source of Particulate Matter (PM) emissions.
- 5.1.2 This permit is issued based on the source not being a major source of HAPs.

5.2 Applicable Regulations

- 5.2.1 Specific emission units at this source are subject to particular regulations as set forth in Section 7 (Unit-Specific Conditions) of this permit.
- 5.2.2 In addition, emission units at this source are subject to the following regulations of general applicability:
 - a. No person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally overhead at a point beyond the property line of the source unless the wind speed is greater than 40.2 kilometers per hour (25 miles per hour), pursuant to 35 IAC 212.301 and 212.314.
 - b. No person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to the requirements of 35 IAC 212.122, pursuant to 35 IAC 212.123(a), except as allowed by 35 IAC 212.123(b) and 212.124.

5.2.3 Ozone Depleting Substances

The Permittee shall comply with the standards for recycling and emissions reduction of ozone depleting substances pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners in Subpart B of 40 CFR Part 82:

- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

5.2.4 Risk Management Plan

Should this stationary source, as defined in 40 CFR Section 68.3, become subject to the Accidental Release Prevention regulations in 40 CFR Part 68, then the owner or operator shall submit [40 CFR 68.215(a)(2)(i) and (ii)]:

- a. A compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR 68.10(a); or
- b. A certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of the Risk Management Plan (RMP), as part of the annual compliance certification required by 40 CFR Part 70 or 71.
- 5.2.5 a. Should this stationary source become subject to a regulation under 40 CFR Parts 60, 61, or 63, or 35 IAC after the date issued of this permit, then the owner or operator shall, in accordance with the applicable regulation(s), comply with the applicable requirements by the date(s) specified and shall certify compliance with the applicable requirements of such regulation(s) as part of the annual compliance certification, as required by 40 CFR Part 70 or 71.
 - b. No later than upon the submittal for renewal of this permit, the owner or operator shall submit, as part of an application, the necessary information to address either the non-applicability of, or demonstrate compliance with all applicable requirements of any potentially applicable regulation which was promulgated after the date issued of this permit.

5.2.6 Episode Action Plan

a. If the source is required to have an episode action plan pursuant to 35 IAC 244.142, the Permittee shall maintain at the source and have on file with the Illinois EPA a written episode action plan (plan) for reducing the levels of emissions during yellow alerts, red alerts, and emergencies, consistent with safe operating procedures. The plan shall contain the information specified in 35 IAC 244.144.

- b. The Permittee shall immediately implement the appropriate steps described in this plan should an air pollution alert or emergency be declared.
- c. If a change occurs at the source which requires a revision of the plan (e.g., operational change, change in the source contact person), a copy of the revised plan shall be submitted to the Illinois EPA for review within 30 days of the change. Such plans shall be further revised if disapproved by the Illinois EPA.
- d. For sources required to have a plan pursuant to 35 IAC 244.142, a copy of the original plan and any subsequent revisions shall be sent to:
 - i. Illinois EPA, Compliance Section; and
 - ii. For sources located in Cook County and outside of the city of Chicago: Cook County Department of Environmental Control; or
 - iii. For sources located within the city of Chicago: Chicago Department of Environmental Control.
- 5.2.7 PM_{10} Contingency Measure Plan

N/A

5.2.8 CAM Plan

This stationary source has a pollutant-specific emissions unit that is subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources. The source must submit a CAM plan for each affected pollutant-specific emissions unit upon application for renewal of the initial CAAPP permit, or upon a significant modification to the CAAPP permit for the construction or modification of a large pollutant-specific emissions unit which has the potential post-control device emissions of the applicable regulated air pollutant that equals or exceeds major source threshold levels.

5.3 Non-Applicability of Regulations of Concern

None

5.4 Source-Wide Operational and Production Limits and Work Practices

In addition to the source-wide requirements in the Standard Permit Conditions in Section 9, the Permittee shall fulfill the

following source-wide operational and production limitations and/or work practice requirements:

None

5.5 Source-Wide Emission Limitations

5.5.1 Permitted Emissions for Fees

The annual emissions from the source, not considering insignificant activities as addressed by Section 3.0 of this permit, shall not exceed the following limitations. The overall source emissions shall be determined by adding emissions from all emission units. Compliance with these limits shall be determined on a calendar year basis. These limitations (Condition 5.5.1) are set for the purpose of establishing fees and are not federally enforceable.

Permitted Emissions of Regulated Pollutants

Pollutant	Tons/Year
Volatile Organic Material (VOM)	1.20
Sulfur Dioxide (SO ₂)	0.27
Particulate Matter (PM)	713.42
Nitrogen Oxides (NO _x)	60.72
HAP, not included in VOM or PM	
TOTAL	775.61

5.5.2 Emissions of Hazardous Air Pollutants

This permit is issued based on the emissions of HAPs as listed in Section 112(b) of the CAA not being equal to or exceeding 10 tons per year of a single HAP or 25 tons per year of any combination of such HAPs, so that this source is considered a minor source for HAPs.

5.5.3 Other Source-Wide Emission Limitations

Other source-wide emission limitations are not set for this source pursuant to either the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21, Illinois EPA rules for Major Stationary Sources Construction and Modification, 35 IAC Part 203, or Section 502(b)(10) of the CAA. However, there may be unit specific emission limitations set forth in Section 7 of this permit pursuant to these rules.

5.6 General Recordkeeping Requirements

5.6.1 Emission Records

The Permittee shall maintain records of the following items for the source to demonstrate compliance with

Condition 5.5.1, pursuant to Section 39.5(7) (b) of the Act:

Total annual emissions on a calendar year basis for the emission units covered by Section 7 (Unit Specific Conditions) of this permit.

5.6.2 Records for Alternative Operating Scenario

N/A

- 5.6.3 Retention and Availability of Records
 - a. All records and logs required by this permit shall be retained for at least five years from the date of entry (unless a longer retention period is specified by the particular recordkeeping provision herein), shall be kept at a location at the source that is readily accessible to the Illinois EPA or USEPA, and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request.
 - b. The Permittee shall retrieve and print, on paper during normal source office hours, any records retained in an electronic format (e.g., computer) in response to an Illinois EPA or USEPA request for records during the course of a source inspection.
- 5.7 General Reporting Requirements
 - 5.7.1 General Source-Wide Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the source with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken.

5.7.2 Annual Emissions Report

The annual emissions report required pursuant to Condition 9.7 shall contain emissions information for the previous calendar year.

5.8 General Operational Flexibility/Anticipated Operating Scenarios N/A

5.9 General Compliance Procedures

5.9.1 General Procedures for Calculating Emissions

Compliance with the source-wide emission limits specified in Condition 5.5 shall be based on the recordkeeping and reporting requirements of Conditions 5.6 and 5.7, and compliance procedures in Section 7 (Unit Specific Conditions) of this permit.

6.0 EMISSION REDUCTION MARKET SYSTEM (ERMS)
[NOT APPLICABLE TO THIS PERMIT]

7.0 UNIT SPECIFIC CONDITIONS

7.1 Unit 01: Three Fluidized Bed Dryers (#1, #2, #3)
Control: Three Riley Venturi Rod Scrubbers

7.1.1 Description

The three fluidized bed dryers are natural gas fired units which are designed to remove water from the incoming wet sand. The three dryers, rated at 33 mmBtu/hr each, can be fired on propane under a theoretical operating scenario in which natural gas supply is curtailed, a scenario considered unlikely. Fluidized bed dryers heat an incoming air stream, direct it through the bed which is held in suspension via air movement and exhausted through a control device. The control device on each dryer is a Riley Venturi Rod wet scrubber which utilizes impingement of particulate matter on water droplets to remove small particles from the air stream.

7.1.2 List of Emission Units and Air Pollution Control Equipment

Emission Description Unit		Emission Control Equipment
	Fluidized Bed Dryer #1	Riley Venturi Rod Scrubber #1
01	Fluidized Bed Dryer #2	Riley Venturi Rod Scrubber #2
	Fluidized Bed Dryer #3	Riley Venturi Rod Scrubber #3

7.1.3 Applicability Provisions and Applicable Regulations

- a. The "affected fluidized bed dryers" for the purpose of these unit-specific conditions, are the three fluidized bed dryers listed in 7.1.2.
- b. The affected fluidized bed dryers are subject to the emission limits identified in Condition 5.2.2.
- c. The affected fluidized bed dryers are subject to 35 IAC Section 212.321, which states:
 - i. Except as further provided in this Part, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of this Section.

ii. Interpolated and extrapolated values of the data in subsection (c) of this Section shall be determined by using the equation:

$$E = C + A(P)^{B}$$

where:

- P = Process weight rate; and
- E = Allowable emission rate; and,
- A. Up to process weight rates of 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	Kg/hr	lbs/hr
A	1.214	2.54
В	0.534	0.534

B. For process weight rate greater than or equal to 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	Kg/hr	lbs/hr
A	11.42	24.8
В	0.16	0.16

iii. Limits for Process Emission Units For Which Construction or Modification Commenced On or After April 14, 1972

Metric		English	
P	E	P	E
Mg/hr	Kg/hr	T/hr	lbs/hr
0.05	0.25	0.05	0.55
0.1	0.29	0.10	0.77
0.2	0.42	0.20	1.10
0.3	0.64	0.30	1.35
0.4	0.74	0.40	1.58
0.5	0.84	0.50	1.75
0.7	1.00	0.75	2.40
0.9	1.15	1.00	2.60
1.8	1.66	2.00	3.70
2.7	2.1	3.00	4.60
3.6	2.4	4.00	5.15
4.5	2.7	5.00	6.00
9.	3.9	10.00	8.70
13.	4.8	15.00	10.80
18.	5.7	20.00	12.50
23.	6.5	25.00	14.00

Metric		English	
P	E	P	E
Mg/hr	Kg/hr	T/hr	lbs/hr
27.	7.1	30.00	15.60
32.	7.7	35.00	17.00
36.	8.2	40.00	18.20
41.	8.8	45.00	19.20
45.	9.3	50.00	20.50
90.	13.4	100.00	29.50
140.	17.0	150.00	37.00
180.	19.4	200.00	43.00
230.	22.	250.00	48.50
270.	24.	300.00	53.00
320.	26.	350.00	58.00
360.	28.	400.00	62.00
408.	30.1	450.00	66.00
454.	30.4	500.00	67.00

[35 IAC 212.321]

d. The affected fluidized bed dryers are subject to 35 IAC 214.301 which states: Except as further provided by this Part, no person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission source to excess 2000 ppm. [35 IAC 214.301]

7.1.4 Non-Applicability of Regulations of Concern

- a. This permit is issued based on the affected fluidized bed dryers not being subject to the New Source Performance Standards (NSPS) for Non-Metallic Mineral Processing, 40 CFR Part 60, Subpart 000 because the affected existing material handling units were installed prior to August 31, 1983.
- b. This permit is issued based on the affected fluidized bed dryers not being subject to 35 IAC 212.322 because the affected fluidized bed dryers were installed after April 14, 1972.
- c. The affected fluidized bed dryers are not subject to 35 IAC 216.121 for emissions of carbon monoxide because the dryers are not by definition a fuel combustion emission unit.
- d. The affected fluidized bed dryers are not subject to 40 CFR 60 Subpart UUU-Standards of Performance for Calciners and Dryers in Mineral Industries because the affected dryers did not commence construction, modification or reconstruction after April 23, 1986.

7.1.5 Control Requirements

- a. Control systems for the affected process emission units must perform so as to achieve compliance with the limits given in Condition 7.1.3.
- b. The Permittee shall follow good operating practices for the control equipment including periodic inspection, routine maintenance and prompt repair of defects.

7.1.6 Emission Limitations

There are no specific emission limitations for these units, however, there are source wide emission limitations in Condition 5.5 that include this unit.

7.1.7 Operating and Testing Requirements

- a. Natural gas shall be the only fuel used. Propane fuel may be used in the approximately 100 gas fired space heaters (less than 1.0 mmBtu/hr each) and three fluidized bed dryers if there is a natural gas curtailment due to a natural gas shortage.
- b. Upon reasonable request by the Illinois EPA, pursuant to Section 39.5(7)(d) of the Act, measurements of particulate matter emissions from the three dryers shall be conducted in accordance with USEPA Reference Methods 1-5 and 202, so as to demonstrate compliance with the emission limits in Condition 7.1.3 c). The Permittee shall provide a written test plan to the Illinois EPA at least 60 days prior to the testing, pursuant to Section 39.5(7)(a) of the Act. A copy of the test results shall be provided to the Illinois EPA within 60 days of completion of the testing.

7.1.8 Inspection Requirements

The affected fluidized bed dryers are subject to 35 IAC 212.324(f), which states: Proper maintenance shall include the following minimum requirements:

- a. Visual inspections of air pollution control equipment. [35 IAC 212.324(f)(1)]
- b. Maintenance of an adequate inventory of spare parts; [35 IAC 212.324(f)(2)]
- c. Expeditious repairs, unless the emission unit is shut down. [35 IAC 212.324(f)(3)]
- d. Although the affected fluidized bed dryers and wet scrubbers are not subject to 40 CFR 60.674, the

Permittee has elected to use the monitoring techniques given at 40 CFR 60.674 as follows:

- i. The owner or operator of any affected facility subject to the provisions of 40 CFR 60 Subpart 000 which uses a wet scrubber to control emissions shall install, calibrate, maintain and operate the following monitoring devices:
 [40 CFR 60.674]
- ii. A device for the continuous measurement of the pressure loss of the gas stream through the scrubber. The monitoring device must be certified by the manufacturer to be accurate within ±250 Pascals ±1 inch water gauge pressure and must be calibrated on an annual basis in accordance with manufacturer's instructions. [40 CFR 60.674(a)]
- iii. A device for the continuous measurement of the scrubbing liquid flow rate to the wet scrubber. The monitoring device must be certified by the manufacturer to be accurate within ±5 percent of design scrubbing liquid flow rate and must be calibrated on an annual basis in accordance with manufacturer's instructions. [40 CFR 60.674(b)]

7.1.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for each affected new material handling unit to demonstrate compliance with 5.5.1, pursuant to Section 39.5(7) (b) of the Act:

- a. Throughput of product rate (process weight rate) for the systems in tons/month and tons/year.
- b. The hours of operation for each dryer so as to determine the process weight rate on an hourly basis.
- c. The aggregate monthly and yearly Particulate Matter emissions from the system, based on the use of applicable emission factors, the hours of operation and the typical hourly emission rate, with supporting calculations.
- d. The aggregate monthly and yearly Particulate Matter emissions from the system, based on the use of applicable emission factors based on the operating schedule and the typical hourly emission rate, with supporting calculations.

- e. Pursuant to 35 IAC 212.324(g), the Permittee shall keep:
 - i. Written records of inventory and documentation of inspections, maintenance, and repairs of all air pollution control equipment. [35 IAC 212.324(g)(1)]
 - ii. The owner or operator shall document any period during which any process emission unit was in operation when the air pollution control equipment was not in operation or was malfunctioning so as to cause an emissions level in excess of the emission limitation. These records shall include documentation of causes for pollution control equipment not operating or such malfunction and shall state what corrective actions were taken and what repairs were made. [35 IAC 212.324(g)(2)]
 - iii. A written record of the inventory of all spare
 parts not readily available from local
 suppliers shall be kept and updated. [35 IAC
 212.324(g)(3)]
 - iv. Copies of all records required by Condition 7.4.9 shall be submitted to the Agency within ten (10) working days after a written request by the Agency. [35 IAC 212.324(g)(4)]
 - v. The records required under Condition 7.1.9 shall be kept and maintained for at least five (5) years and shall be available for inspection and copying by Agency representatives during working hours.
- f. Measurements of pressure drop (inches water column) and liquid (scrubbant) flow rate (gallons per minute) shall be taken daily from each of the three scrubbers. The records shall be kept for a period of five years from the date of measurement.
- g. Natural gas usage in the three dryers (therms or million cubic feet) shall be kept on a monthly and yearly basis.
- h. Propane usage in the three fluidized bed dryers and the approximately 100 space heaters. Emissions shall be determined using corresponding emission factors for propane based on a monthly and yearly basis.

7.1.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the affected existing material handling units, with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

upon written request by the Agency, a report shall be submitted to the Agency for any period specified in the request stating the following: the dates during which any process emission unit was in operation when the air pollution control equipment was not in operation or was not operating properly, documentation of causes for pollution control equipment not operating or not operating properly, and a statement of what corrective actions were taken and what repairs were made. [35 IAC 212.324(g)(6)]

7.1.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.1.12 Compliance Procedures

- a. Compliance with Particulate Matter emissions from the dryers shall be demonstrated by the proper operation of the control equipment. Compliance with 35 IAC 212.321 will be assumed if the pressure drop and liquid flow rate are within manufacturer's operating specifications.
- b. Calculations of emissions due to combustion of natural gas in the three fluidized bed dryers shall be based on the records required by 7.1.9(g) above and the following emission factors:

 NO_x : 140 lb/ mm ft³ natural gas combusted. CO: 35 lb/mm ft³ natural gas combusted.

 SO_2 : 0.6 lb/ mm ft³ VOC: 2.8 lb/ mm ft³

Source: AP-42, Table 1.4-1.5th Edition Revised October 1996.

Calculations of Total PM from the dryers are determined using the emission factors given in AP-42 $5^{\rm th}$ Edition. Nov. 1995 Table 11.19.1 for sand dryer with wet scrubber.

Total PM equals 0.039 lb/ton *(0.019 kg/Mg).

* This factor is for filterable PM only.
Filterable PM is that PM collected on or prior
to the filter of an EPA Method 5 sampling
train. Condensible organic and inorganic PM
emission factors are not available. Factors
presented can be considered a conservative
underestimate of total PM.

7.2 Unit 02: Two hundred and Eighteen Process Emission Units and Building Process Fugitives.

Control 02: Ten Baghouses (A-J)

7.2.1 Description

The 218 process emission units are located throughout the four producing mills identified as Mill "D", Mill "U", Mill "F", and Mill "G" and the "Fine Sand Plant". Mill "G" contains baghouses F (#7 Dust Collection System), G (#8 Dust Collection System), and H (#6 Dust Collection System). Mill "D" (or "Process Building"- which houses the fluidized bed dryers) contains baghouse A ("Process Building Dust Collector"). Mill "D" (consists of two buildings, "Sizing and Bagging") contains baghouses B (Sizing Building South), C (Sizing Building North), D (Sizing Building West), and E (Sizing Building East). Mill "D"("Bulk Loading") contains baghouse J (Mill D Bulk Loading Dust Collector or "Bulk Rail Loadout Dust Collector"). Mill "G" contains Baghouse G ("Mill 'G' Bagging Dust Collector); Baghouse "F" ("Mill 'G' North Dust Collector"); and Baghouse "H" ("Mill 'G' South Dust Collector") The "Fine Sand Plant" ("Mill F") contains Baghouse I ("Fine Sand Plant Dust Collector").

The 218 process emission units generally consist of sources which move, dry, store, size or mill silica sand. Typical process emission point sources are: truck and rail loading; conveyors; elevators and bins; product screens and classifiers; product baggers and milling. At US Silica, these sources are generally controlled by baghouses.

Nine baghouses (A, B, C, D, E, F, G, H, J) have a design flow rate of 25,000 cfm. However, the nine baghouses have different sized fans which range from a flow rate of 11,500 to 25,000 cfm depending on the number and type of sources controlled by each baghouse. The tenth baghouse (baghouse I-Fine Sand Dust Collection System) is a different design than the other nine and is not expandable above 10,500 cfm.

Within the process buildings there is a finite amount of process fugitive dust that is generated. The process buildings themselves impart a degree of control to this process dust in that they enclose and act as settling chambers. US Silica has vacuum cleanup devices to remove accumulations within buildings. However, it is expected that some fugitive emissions do escape from the buildings. The buildings themselves have ventilator fans which remove air and maintain a slight negative building pressure. Building process fugitives are those emissions which occur due to ventilation.

7.2.2 List of Emission Units and Air Pollution Control Equipment

Emission	Description	Emission Control
Unit		Equipment
02	Conveyor 4-8A	Baghouse A
	Elevator 4-11	Baghouse A
	Scalp Screens	Baghouse A
	Conveyor 4-12	Baghouse A & B
	Elevator 4-14	Baghouse A
	6 Course Screens	Baghouse A
	6 Course Screens	Baghouse A
	Conveyor 4-18A	Baghouse A
	Conveyor 4-18B	Baghouse A
	Conveyor 4-19A	Baghouse A
	Conveyor 4-19B	Baghouse A & B
	Feed Hopper A	Baghouse A
	Elevator 4-9	Baghouse A
	Conveyor 4-10A	Baghouse A
	Elevator 4-21	Baghouse B
	Derrick Screen #1	Baghouse B
	Derrick Screen #2	Baghouse B
	Derrick Screen #6	Baghouse C
	Bin 1 for ASTM	Baghouse C
	Elevator 4-12	Baghouse C
	Derrick Screen #3	Baghouse C
	ASTM Bagging	Baghouse D
	Bin 2	Baghouse B
	Bin 3	Baghouse B
<u> </u>	Conveyor I	_
<u> </u>	Conveyor G	Baghouse B
<u> </u>	_	Baghouse F
	Conveyor H	Baghouse G
	Elevator GH	Baghouse F
	Conveyor GH	Baghouse F
	North Storage Bin	Baghouse F
	South Storage Bin	Baghouse F
	Mill "G" Office	Baghouse F
	Grind Mill 1	Baghouse G
	Grind Mill 2	Baghouse G
	Grind Mill 3	Baghouse F
	Grind Mill 4	Baghouse F
	Grind Mill 5	None
	Grind Mill 6	None
	Grind Mill 7	Baghouse G
	Grind Mill 9	Baghouse G
	Airslide V	Baghouse G
	Airslide W	Baghouse G
	Airslide X	Baghouse F
	Airslide Y	Baghouse F
	Airslide Z	Baghouse F
	Airslide A	Baghouse F
	Airslide B	Baghouse G

Emission	Description	Emission Control
Unit	1	Equipment
	Mill Elevator 15	Baghouse G
	Mill Elevator 2	Baghouse G
02	Mill Elevator 3	Baghouse G
(Cont.)	Mill Elevator 46	Baghouse G
	Mill Elevator 79	Baghouse F
	Classifier Elevator 10	Baghouse F
	Classifier Elevator 20	Baghouse F
	Classifier #1	None
	Classifier #2	None
	Classifier #3	None
	Classifier #4	None
	3 Hummer Screens	Baghouse G
	Storage Elevator 1	Baghouse F
	Storage Elevator 2	Baghouse F
	Storage Elevator 3	Baghouse F
	Storage Elevator 4	Baghouse F
	Storage Elevator 5	Baghouse F
	Storage Elevator 6	Baghouse F
	Vibrating Screen 1	Baghouse F
	Vibrating Screen 2	Baghouse F
	Vibrating Screen 3	Baghouse F
	Vibrating Screen 4	Baghouse F
	Vibrating Screen 5	Baghouse F
	Vibrating Screen 6	Baghouse F
	Product Flour Bin 1	Baghouse F
	Product Flour Bin 2	Baghouse F
	Product Flour Bin 3	Baghouse F
	Product Flour Bin 4	Baghouse F
	Product Flour Bin 5	Baghouse F
	Product Flour Bin 6	Baghouse F
	Product Flour Bin 7	Baghouse G
	Product Flour Bin 8	Baghouse G
	Product Flour Bin 9	Baghouse G
	Product Flour Bin 10	Baghouse G
	Product Flour Bin 11	Baghouse G
_	Product Flour Bin 12	Baghouse G
	Product Flour Bin 13	Baghouse G
	Product Flour Bin 14	Baghouse G
	Hopper 1	Baghouse G
	Hopper 23	Baghouse G
	Hopper 4	Baghouse G
	Hopper 56	Baghouse G
	Bagger 1	Baghouse H
	Bagger 23	Baghouse H
	Bagger 4	Baghouse H
	Bagger 56	Baghouse H
	Truck Load C	Baghouse G
	Truck Load D	Baghouse G
	Rail Load C	Baghouse G

Emission	Dogarintian	Emission Control
Unit	Description	Equipment
0111.0	Rail Load D	Baghouse G
	Conveyor 5-1A	Baghouse H
02	Declined Conveyor A	Baghouse H
(Cont.)	Conveyor 5-1B	None
(001101)	Clean Out Bin	Baghouse H
	Broken Bag Dumpster	Baghouse H
	Palletizer Area	Baghouse H
	Conveyor 4-10B	Baghouse B & I
	Airslide Z	Baghouse B
	#3 Exolon Screens	Baghouse C
	Bin 44	Baghouse C
	Mixer	Baghouse D
	Bagger Clog Product	Baghouse D
	Center Distribution Box	None
	Conveyor 4-11E	Baghouse B
	Conveyor 4-11F	Baghouse C
	North Distribution Box	None
	South Distribution Box	None
	GKC #1	Baghouse B & C
	GKC #2	Baghouse B & C
	1 Hummer Screen	Baghouse C
	Bin 4A	Baghouse C
	Bin 5A	Baghouse C
	Bin 6A	Baghouse C
	Bin 7A	Baghouse C
	Bin 8A	Baghouse B
	Bin 9A	Baghouse B
	Bin 10 & 11	Baghouse C
	Bin 12 & 13	Baghouse C
	Bin 14A	Baghouse B
	Bin 16A	Baghouse B
	Elevator 4-13	Baghouse B
	Truck Load B	Baghouse B
	GP Elevator	Baghouse B
	GP Conveyor	Baghouse B
	Derrick Screen #4	Baghouse B
	Derrick Screen #5	Baghouse B
	GKC #3	Baghouse C
	5070 Surge Bin	Baghouse E
	2 Exolon Screens	Baghouse C
	Bin 20A	Baghouse E
	5070 Bagger	Baghouse D
	Merrick Conveyor 1	Baghouse B
	Merrick Conveyor 2	Baghouse B
	Merrick Conveyor 3	Baghouse B
	Merrick Conveyor 4	Baghouse B
	A Line Blending Belt	Baghouse B, C & D
	B Line Blending Belt	Baghouse B, C & D
	C Line Blending Belt	Baghouse B, C & D
<u> </u>	<i>J</i> -	<u> </u>

Emission Unit Description Emission Contraction Equipment D Line Blending Belt Baghouse B, C & A Line Elevator Baghouse B O2 B Line Elevator Baghouse B (Cont.) C Line Elevator Baghouse C D Line Elevator Baghouse C	a D
D Line Blending Belt Baghouse B, C & A Line Elevator Baghouse B O2 B Line Elevator Baghouse B (Cont.) C Line Elevator Baghouse C	ž D
02 B Line Elevator Baghouse B (Cont.) C Line Elevator Baghouse C	
(Cont.) C Line Elevator Baghouse C	
D Line Elevator Baghouse C	
D dine dievacoi Dagnoube c	
Conveyor 4-31 Baghouse D	
Conveyor 4-32 Baghouse D	
Conveyor 4-30A Baghouse E	
Conveyor 4-30B Baghouse E	
Horizontal Track Conveyor 4 Baghouse E	
Horizontal Track Conveyor 5 Baghouse E	
Inclined Belt Conveyor 4 Baghouse E &	J
Inclined Belt Conveyor 5 Baghouse E &	
Track Bin 4 Baghouse J	
Track bin 5 Baghouse J	
Track 4 Baghouse J	
Track 5 Baghouse J	
East Bag Bin 1 Baghouse E	
East Bag Bin 2 Baghouse E	
Pool Sand Bagging Baghouse E	
East Bagging Baghouse E	
Bulk Bag Load Baghouse E	
Hopper East Baghouse E	
Bin 34A Baghouse D	
Bin 34B Baghouse D	
Truck Load A Baghouse D	
Cooling Bin C & D Baghouse C	
Cooling C & D Baghouse C	
Conveyor 4-33 Baghouse D	
Cooling Elevator C & D Baghouse C	
West Bag Bin 1 Baghouse D	
West Bag Bin 2 Baghouse D	
West Bagging Baghouse D	
Hopper West Baghouse D	
North Outside Bin Baghouse C	
North Inside Bin Baghouse C	
Bin 35 Baghouse C	
South Inside Bin Baghouse C	
South Outside Bin Baghouse C	
Conveyor AA Baghouse J	
Conveyor BB Baghouse J	
Conveyor CC Baghouse J	
Conveyor DD Baghouse J	
Conveyor EE Baghouse J	
Conveyor FF Baghouse J	
Elevator 4-30 Baghouse I	
Bin 17 Baghouse I	
Bin 18 Baghouse I	
Bin 19 Baghouse I	

Emission	Description	Emission Control
Unit	_	Equipment
	Bin 20	Baghouse I
	Bin 21	Baghouse I
	Bin 22	Baghouse I
	Bin 23	Baghouse I
	Bin 24	Baghouse I
	Bin 25	Baghouse I
	Bin 26	Baghouse I
	Bin 27	Baghouse I
	Bin 28	Baghouse I
	Bin 29	Baghouse I
	Bin 30	Baghouse I
	Bin 31	Baghouse I
	Bin 32	Baghouse I
02	Bin 33	Baghouse I
(Cont.)	Feed Hopper F	Baghouse J
(00110.)	Truck Load F	Baghouse J
	Rail/Truck Load	Baghouse J
	Airslide 9	Baghouse G
	Belt Conveyor (4-36)	None
	One storage Bin (Bin 36)	None
	One Truck Loadout	None
	An elevator	Baghouse I
	Two screens	Baghouse I
	Airslide D	None
	Airslide E	None
	Airslide F	None
	Process Building Fugitives	None

7.2.3 Applicability Provisions and Applicable Regulations

- a. The "affected process emission units" for the purpose of these unit-specific conditions, are the emission units listed in 7.2.2.
- b. The affected process emission units are subject to the emission limits identified in Condition 5.2.2.
- c. The affected process emission units are subject to 40 CFR 60.672 Subpart 000. Standards of Performance for Non-Metallic Mineral Processing Plants, which states:

Standard for Particulate Matter

i. On and after the date on which the performance test required to be conducted by 40 CFR 60.8 is completed, no owner or operator subject to the provisions of 40 CFR 60 Subpart 000 shall cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other affected facility any stack emissions which [40 CFR 672(a)]:

- A. Contain particulate matter in excess of 0.05 g/dscm (0.022 gr/dscf); and [40 CFR 60.672(a)(1)]
- B. Exhibit greater than 7 percent opacity, unless the stack emissions are discharged from an affected facility using a wet scrubbing control device. Facilities using a wet scrubber must comply with the reporting provisions of 40 CFR 60.676 (c), (d), and (e). [40 CFR 60.672(a)(2)]
- ii. On and after the sixtieth day after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup as required under 40 CFR 60.11, no owner or operator subject to the provisions of 40 CFR 60 Subpart 000 shall cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other affected facility, any fugitive emissions which exhibit greater than 10 percent opacity, except as provided in 40 CFR 672(c),(d), and (e). [40 CFR 60.672(b)]
- iii. On and after the sixtieth day after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup as required by 40 CFR 60.11, no owner or operator shall cause to be discharged into the atmosphere from any crusher, at which a capture system is not used, fugitive emissions which exhibit greater than 15 percent opacity. [40 CFR 60.672(c)]
- iv. Truck dumping of nonmetallic minerals into any screening operation, feed hopper, or crusher is exempt from the requirements 40 CFR 60.672.

 [40 CFR 60.672(d)]
- v. If any transfer point on a conveyor belt or any other affected facility is enclosed in a building, then each enclosed affected facility must comply with the emission limits in 40 CFR 60.672(a), (b) and (c), or the building enclosing the affected facility or facilities must comply with the following emission limits: [40 CFR 60.672(e)]

- A. No owner or operator shall cause to be discharged into the atmosphere from any building enclosing any transfer point on a conveyor belt or any other affected facility any visible fugitive emissions except emissions from a vent as defined in 40 CFR 60.671. [40 CFR 60.672(e)(1)]
- B. No owner or operator shall cause to be discharged into the atmosphere from any vent of any building enclosing any transfer point on a conveyor belt or any other affected facility emissions which exceed the stack emissions limits in 40 CFR 60.672(a). [40 CFR 60.672(e)(2)]
- vi. On and after the sixtieth day after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup as required under 40 CFR 60.11, no owner or operator shall cause to be discharged into the atmosphere from any baghouse that controls emissions from only an individual, enclosed storage bin, stack emissions which exhibit greater than 7 percent opacity. [40 CFR 60.672(f)]
- vii. Owners or operators of multiple storage bins with combined stack emissions shall comply with the emission limits in 40 CFR 60.672(a)(1) and (a)(2). [40 CFR 60.672(g)]
- viii. On and after the sixtieth day after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup, no owner or operator shall cause to be discharged into the atmosphere any visible emissions from: [40 CFR 60.672(h)]
 - A. Wet screening operations and subsequent screening operations, bucket elevators, and belt conveyors that process saturated material in the production line up to the next crusher, grinding mill or storage bin. [40 CFR 60.672(h)(1)]
 - B. Screening operations, bucket elevators, and belt conveyors in the production line downstream of wet mining operations, where such screening operations, bucket elevators, and belt conveyors process saturated materials up to the first

crusher, grinding mill, or storage bin in the production line. [40 CFR 60.672(h)(2)]

7.2.4 Non-Applicability of Regulations of Concern

a. This permit is issued based on the various process emission point sources not being subject to 35 IAC 212.321 or 35 IAC 212.322 by request by the Permittee. Due to the plant layout and impractical means of differentiating emissions from various point sources, the Permittee requested that all sources be subject to the more stringent NSPS Subpart 000 limitations.

7.2.5 Control Requirements

Control systems for the affected process emission units must perform so as to achieve compliance with the limits given in Condition 7.2.3.

7.2.6 Emission Limitations

a. In addition to Condition 5.2.2 and the source-wide emission limitations in Condition 5.5, the affected process emission units are subject to the following:

Emissions from the 12 Derrick vibrating screens (wet process building a.k.a. washing and drying building) shall not exceed the following limits:

 $\begin{array}{c} {\tt Particulate~Matter~Emissions} \\ \underline{({\tt Ton/Month})} & \underline{({\tt Ton/Year})} \end{array}$

0.41 4.93

These limits are based on the allowable emission (1.13 lbs/hr) and maximum hours of operation (8736 hrs/yr) indicated in the permit application.

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total). These limits were established in Construction Permit #93060069. [T1]

b. In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, the affected process emission units are subject to the following:

Emissions from the two Derrick vibrating screens and the elevator (Sizing Building) shall not exceed the following limits:

$\begin{tabular}{ll} Particulate Matter Emissions \\ \hline (Ton/Month) & (Ton/Year) \\ \hline \end{tabular}$

0.135

These limits are based on the allowable emission (0.37 lbs/hr) and maximum hours of operation (8736 hrs/yr) indicated in the permit application. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total). These limits were established in Construction Permit #93060121. [T1]

c. In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, the affected process emission units are subject to the following:

Emissions from the affected sand loading process consisting of six 30 inch conveyor belts C-1,C-2,C-3,C-4,C-5; two bulk railcar loading chutes; one Bulk Truck Loading Chute and one fine Sand Loading Chute C-2 controlled by a baghouse as described in the application shall not exceed the following limits:

	PM Emis	sions
Emission Unit	(Ton/Month)	(Ton/Year)
RR/Truck Loading/Fine	1.46	17.52
Sand Chutes Conveyors & Transfers	0.159	1.91

These limits are based on maximum sand throughput rates, standard emission factors and procedures and the information provided in the permit application.

The Fine Sand Loading Chute is limited to 150 tons per hour. The maximum sand throughput to the three railcar/truck load out units of 550 tons per hour and 1.75 million tons per year as described in the permit application.

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total). These limits were established in Operating Permit #94040090. [T1]

d. In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, the affected Belt Conveyor (4-36), one storage bin (Bin 36) and one Truck Loadout (Truckload D) are subject to the following:

- i. Particulate Matter emissions from each emission source, shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/year. These limits were established in Construction Permit #97090033.
- e. In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, the affected elevator and two screens controlled by Baghouse I are subject to the following:
 - i. Particulate Matter emissions from each emission source, shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/year. These limits were established in Construction Permit #97110068
- 7.2.7 Operating Requirements

None

7.2.8 Inspection and Monitoring Requirements

The affected process emission units are subject to the monitoring requirements of 40 CFR 60.674 which states:

- a. The owner or operator of any affected facility subject to the provisions of 40 CFR 60 Subpart 000 which uses a wet scrubber to control emissions shall install, calibrate, maintain and operate the following monitoring devices: [40 CFR 60.674]
 - i. A device for the continuous measurement of the pressure loss of the gas stream through the scrubber. The monitoring device must be certified by the manufacturer to be accurate within ±250 Pascals ±1 inch water gauge pressure and must be calibrated on an annual basis in accordance with manufacturer's instructions. [40 CFR 60.674(a)]
 - ii. A device for the continuous measurement of the scrubbing liquid flow rate to the wet scrubber. The monitoring device must be certified by the manufacturer to be accurate within ±5 percent of design scrubbing liquid flow rate and must be calibrated on an annual basis in accordance with manufacturer's instructions. [40 CFR 60.674(b)]
- b. The ten baghouses (A-J) shall be monitored for pressure drop (inches water column) from inlet to outlet and for visible emissions on a daily basis.

7.2.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for each affected process emission unit to demonstrate compliance with condition 5.5.1 and 7.2.6 pursuant to Section 39.5(7) (b) of the Act: 2.1.9

The Permittee shall maintain records of the following items for the system to demonstrate compliance:

- a. Throughput of product rate (process weight rate) for the systems in tons/month and tons/year.
- b. The aggregate monthly and yearly Particulate Matter emissions from the system, based on the use of applicable emission factors based on the operating schedule and the typical hourly emission rate, with supporting calculations.
- c. Records of daily baghouse pressure drop and visible emissions for ten baghouses shall be kept for a period of three years from date of entry.

7.2.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the affected process emission units with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

a. Reporting of Malfunctions and Breakdowns.

The Permittee shall provide the following notification and reports to the Illinois EPA, Compliance Section and Regional Field Office, pursuant to 35 IAC 201.263, concerning continued operation of an affected process emission point source subject to Condition 7.2.3(c) during malfunction or breakdown of the control features of the affected process emission point source.

- i. The Permittee shall notify the Illinois EPA's regional office by telephone as soon as possible during normal working hours, but no later than three (3) days, upon the occurrence of noncompliance due to malfunction or breakdown.
- ii. Upon achievement of compliance, the Permittee shall give a written follow-up notice to the Illinois EPA, Compliance Section and Regional

Field Office, providing a detailed explanation of the event, an explanation why continued operation of the process emission unit was necessary, the length of time during which operation continued under such conditions, the measures taken by the Permittee to minimize and correct deficiencies with chronology, and when the repairs were completed or when the affected process emission unit was taken out of service.

- iii. If compliance is not achieved within 5 working days of the occurrence, the Permittee shall submit interim status reports to the Illinois EPA, Compliance Section and Regional Field Office, within 5 days of the occurrence and every 14 days thereafter, until compliance is achieved. These interim reports shall provide a brief explanation of the nature of the malfunction or breakdown, corrective actions accomplished to date, actions anticipated to occur with schedule, and the expected date on which repairs will be complete or the process emission unit will be taken out of service.
- b. The affected process emission units are subject to the reporting requirements of Subpart OOO, 40 CFR 60.676 as follows:
 - i. Each owner or operator seeking to comply with 40 CFR 60.670(d) shall submit to the Administrator the following information about the existing facility being replaced and the replacement piece of equipment. [40 CFR 60.676(a)]
 - A. For a crusher, grinding mill, bucket elevator, bagging operation, or enclosed truck or railcar loading station: [40 CFR 60.676(a)(1)]
 - The rated capacity in tons per hour of the existing facility being replaced and [40 CFR 60.676(a)(1)(i)]
 - The rated capacity in tons per hour of the replacement equipment. [40 CFR 60.676(a)(1)(ii)]
 - B. For a screening operation: [40 CFR
 60.676(a)(2)]

- The total surface area of the top screen of the existing screening operation being replaced and [40 CFR 60.676(a)(2)(i)]
- The total surface area of the top screen of the replacement screening operation. [40 CFR 60.676(a)(2)(ii)]
- C. For a conveyor belt: [40 CFR
 60.676(a)(3)]
 - The width of the existing belt
 being replaced and [40 CFR
 60.676(a)(3)(i)]
 - 2. The width of the replacement
 conveyor belt. [40 CFR
 60.676(a)(3)(ii)]
- D. For a storage bin: [40 CFR 60.676(a)(4)]
 - 1. The rated capacity in tons of the existing storage bin being replaced and [40 CFR 60.676(a)(4)(i)]
 - 2. The rated capacity in tons of
 replacement storage bins. [40 CFR
 60.676(a)(4)(ii)]
- c. During the initial performance test of a wet scrubber, and daily thereafter, the owner or operator shall record the measurements of both the change in pressure of the gas stream across the scrubber and the scrubbing liquid flow rate. [40 CFR 60.676(c)]
- d. After the initial performance test of a wet scrubber, the owner or operator shall submit semi-annual reports to the Administrator of occurrences when the measurements of the scrubber pressure loss (or gain) and liquid flow rate differ by more than ±30 percent from the averaged determined during the most recent performance test. [40 CFR 60.676(d)]
- e. The reports required under 40 CFR 60.676(d) above shall be postmarked within 30 days following end of the second and fourth calendar quarters. [40 CFR 60.676(e)]
- f. The owner or operator of any affected facility shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards set forth in 40 CFR 60.672,

including reports of opacity observations made using Method 9 to demonstrate compliance with 40 CFR 60.672 (b), (c), and (f), and reports of observations using Method 22 to demonstrate compliance with 40 CFR 60.672 (e). [40 CFR 60.676 (f)]

- The owner or operator of any screening operation, g. bucket elevator, or belt conveyor that processes saturated material and is subject to 40 CFR 60.672(h) and subsequently processes unsaturated materials, shall submit a report of this change within 30 days following such change. This screening operation, bucket elevator, or belt conveyor is then subject to the 10 percent opacity limit in 40 CFR 60.672(b) and the emission test requirements of 40 CFR 60.11 and 40 CFR 60.676. Likewise a screening operation, bucket elevator, or belt conveyor that processes unsaturated material but subsequently processes saturated material shall submit a report of this change within 30 days following such change. This screening operation, bucket elevator, or belt conveyor is then subject to the no visible emission limit in 40 CFR 60.672(h). [40 CFR 60.676(g)]
- h. The subpart A requirement under 40 CFR 60.7(a)(2) for notification of the anticipated date of initial startup of an affected facility shall be waived for owners or operators of affected facilities regulated under 40 CFR 60 Subpart 000. [40 CFR 60.676(h)]
- i. A notification of the actual date of initial startup of each affected facility shall be submitted to the Administrator. [40 CFR 60.676(i)]
 - i. For a combination of affected facilities in a production line that begin actual initial startup on the same day, a single notification of startup may be submitted by the owner or operator to the Administrator. The notification shall be postmarked within 15 days after such date and shall include a description of each affected facility, equipment manufacturer, and serial number of the equipment, if available. [40 CFR 60.676(i)(1)]
 - ii. For portable aggregate processing plants, the notification of the actual date of initial startup shall include both the home office and the current address or location of the portable plant. [40 CFR 60.676(i)(2)]
- j. The requirements of 40 CFR 60 Subpart 000 remain in force until and unless the Agency, in delegating

enforcement authority to a State under section 111(c) of the Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such States. In that event, affected facilities within the State will be relieved of the obligation to comply with the reporting requirements of 40 CFR 60.676, provided that they comply with requirements established by the State. [40 CFR 60.676(j)]

7.2.11 Operational Flexibility/Anticipated Operating Scenarios $$\mathrm{N/A}$$

7.2.12 Compliance Procedures

The affected material handling units are subject to the requirements of 40 CFR 60.675, which states:

- a. In conducting the performance tests required in 40 CFR 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of 40 CFR 60.8 or other methods and procedures as specified in 40 CFR 60.675, except as provided in 40 CFR 60.8(b). Acceptable alternative methods and procedures are given in 40 CFR 60.8(e). [40 CFR 60.675(a)]
- b. The owner or operator shall determine compliance with the particulate matter standards in 40 CFR 60.672(a) as follows: [40 CFR 60.675(b)]
 - i. Method 5 or Method 17 shall be used to determine the particulate matter concentration. The sample volume shall be at least 1.70 dscm (60 dscf). For Method 5, if the gas stream being sampled is at ambient temperature, the sampling probe and filter may be operated without heaters. If the gas stream is above ambient temperature, the sampling probe and filter may be operated at a temperature high enough, but no higher than 121 °C (250 °F), to prevent water condensation on the filter. [40 CFR 60.675(b)(1)]
 - ii. Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity. [40 CFR 60.675(b)(2)]
- c. In determining compliance with the particulate matter standards in 40 CFR 60.672 (b) and (c), the owner or operator shall use Method 9 and the procedures in 40 CFR 60.11, with the following additions: [40 CFR 60.675(c)(1)]

- i. The minimum distance between the observer and the emission source shall be 4.57 meters (15 feet). [40 CFR 60.675(c)(1)(i)]
- ii. The observer shall, when possible, select a position that minimizes interference from other fugitive emission sources (e.g., road dust). The required observer position relative to the sun (Method 9, Section 2.1) must be followed. [40 CFR 60.675(c)(1)(ii)]
- iii. For affected facilities using wet dust suppression for particulate matter control, a visible mist is sometimes generated by the spray. The water mist must not be confused with particulate matter emissions and is not to be considered a visible emission. When a water mist of this nature is present, the observation of emissions is to be made at a point in the plume where the mist is no longer visible. [40 CFR 60.675(c)(1)(iii)]
- d. In determining compliance with the opacity of stack emissions from any baghouse that controls emissions only from an individual enclosed storage bin under 40 CFR 60.672(f), using Method 9, the duration of the Method 9 observations shall be 1 hour (ten 6-minute averages). [40 CFR 60.675(c)(2)]
- e. When determining compliance with the fugitive emissions standard for any affected facility described under 40 CFR 60.672(b), the duration of the Method 9 observations may be reduced from 3 hours (thirty 6-minute averages) to 1 hour (ten 6-minute averages) only if the following conditions apply: [40 CFR 60.675(c)(3)]
 - i. There are no individual readings greater than
 10 percent opacity; and [40 CFR
 60.675(c)(3)(i)]
 - ii. There are no more than 3 readings of 10 percent for the 1-hour period. [40 CFR 60.675(c)(3)(ii)]
- f. When determining compliance with the fugitive emissions standard for any crusher at which a capture system is not used as described under 40 CFR 60.672(c), the duration of the Method 9 observations may be reduced from 3 hours (thirty 6-minute averages) to 1 hour (ten 6-minute averages) only if the following conditions apply: [40 CFR 60.675(c)(4)]

- i. There are no individual readings greater than
 15 percent opacity; and [40 CFR
 60.675(c)(4)(i)]
- ii. There are no more than 3 readings of 15 percent for the 1-hour period. [40 CFR 60.675(c)(4)(ii)]
- g. In determining compliance with 40 CFR 60.672(e), the owner or operator shall use Method 22 to determine fugitive emissions. The performance test shall be conducted while all affected facilities inside the building are operating. The performance test for each building shall be at least 75 minutes in duration, with each side of the building and the roof being observed for at least 15 minutes. [40 CFR 60.675(d)]
- h. The owner or operator may use the following as alternatives to the reference methods and procedures specified in 40 CFR 60.675: [40 CFR 60.675(e)]
 - i. For the method and procedure of 40 CFR 60.675(c), if emissions from two or more facilities continuously interfere so that the opacity of fugitive emissions from an individual affected facility cannot be read, either of the following procedures may be used: [40 CFR 60.675(e)(1)]
 - A. Use for the combined emission stream the highest fugitive opacity standard applicable to any of the individual affected facilities contributing to the emissions stream. [40 CFR 60.675(e)(1)(i)]
 - B. Separate the emissions so that the opacity of emissions from each affected facility can be read. [40 CFR 60.675(e)(1)(ii)]
- i. To comply with 40 CFR 60.676(d), the owner or operator shall record the measurements as required in 40 CFR 60.676(c) using the monitoring devices in 40 CFR 60.674 (a) and (b) during each particulate matter run and shall determine the averages. [40 CFR 60.675(f)]
- j. If, after 30 days notice for an initially scheduled performance test, there is a delay (due to operational problems, etc.) in conducting any rescheduled performance test required in 40 CFR 60.675, the owner or operator of an affected facility shall submit a notice to the Administrator at least 7 days

prior to any rescheduled performance test. [40 CFR 60.675(g)]

- k. Initial Method 9 performance tests under 40 CFR 60.11
 and 40 CFR 60.675 are not required for: [40 CFR
 60.675(h)]
 - i. Wet screening operations and subsequent screening operations, bucket elevators, and belt conveyors that process saturated material in the production line up to, but not including the next crusher, grinding mill or storage bin. [40 CFR 60.675(h)(1)]
 - ii. Screening operations, bucket elevators, and belt conveyors in the production line downstream of wet mining operations, that process saturated materials up to the first crusher, grinding mill, or storage bin in the production line. [40 CFR 60.675(h)(2)]
- 1. Compliance with the terms and limits given above for the affected non-metallic mineral material handling units can be maintained or determined using plant personnel or consultants certified in Method 9 and by stack testing of appropriate stacks or vents using approved USEPA methods.
- m. Compliance with the particulate matter limitations in Section 7.2.5 is achieved by the proper operation and maintenance of fabric filters as required by this permit and the work practices inherent in operation of the affected system.
- n. Compliance with emission limitations of Condition 7.2.6 shall be determined based on the recordkeeping requirements and the formula listed below:

ER= Σ PR * EF * (1-CE) * (ton/2000 lb)

Where

ER = Emission rate (ton per year)

PR = Production rate (ton per year)

CE = Control efficiency

EF = Emission Factor (pounds per ton)
 For drops = 0.0123
 For screen operation = 0.00013
 For load outs = 0.61

o. Uncontrolled Particulate Matter Emissions shall be calculated using the emission factor provided by the Permittee which is:

TSP (lb/hr) = 0.001 lb PM/lb (2.0 lb/ton) sand throughput.

 $\rm PM_{10}$ (lb/hr)= 0.00085 lb PM10/lb (1.7 lb/ton) sand throughput.

This emission factor was developed by the Permittee. It is more conservative than that given in AP-42 Table 11-19.1. and based on 0% moisture content.

p. Controlled Particulate Matter Emissions = Throughput x Emission Factor x (1 - Control Efficiency). 7.3 Unit 03: One 1,000 Gallon Above Ground Horizontal Gasoline Storage Tank.

Control 03: Submerged Loading Pipe

7.3.1 Description

US Silica operates a 1,000 gallon gasoline storage tank to fuel plant vehicles.

7.3.2 List of Emission Units and Air Pollution Control Equipment

Emission		Emission Control
Unit	Description	Equipment
03	One 1,000 gallon gasoline	Submerged
	storage tank.	Loading Pipe.

7.3.3 Applicability Provisions

- a. The "affected storage tank", for the purpose of these unit-specific conditions is an emission unit described in conditions 7.3.1 and 7.3.2.
- b. No person shall cause or allow the loading of any organic material in any stationary tank having a storage capacity of greater than 946 liter (250 gallons), unless such tank is equipped with a permanent submerged loading pipe [35 IAC 215.122(b)]. Except as provided in the following exemptions: If the tank is a pressure tank then the limitations of 35 IAC 215.122(b) shall not apply [35 IAC 215.121(a)] or if no odor nuisance exists then the limitation of 35 IAC 215.122(b) shall only apply when the tank is used to store a volatile organic liquid with a vapor pressure of 2.5 psia or greater at 70° F.
- c. No person shall cause or allow the transfer of gasoline from any delivery vessel into any stationary tank at gasoline dispensing operation, unless such tank is equipped with a submerged loading pipe [35 IAC 215.583(a)(1)].

7.3.4 Non-Applicability of Regulations of Concern

- a. The affected storage tank is not subject to the requirements of 35 IAC 215.121, because the tank is less than 40,000 gal.
- b. The affected storage tank is not subject to the requirements of 35 IAC 215.122(a), because the tank is less than 40,000 gal.

7.3.5 Operational and Production Limits and Work Practices

Each affected storage tank is subject to the applicable provisions of Condition 7.3.3. The affected storage tank shall be equipped and operated with a submerged loading pipe for submerged fill.

7.3.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide limitations in Condition 5.5, the affected storage tank is subject to the following:

None

7.3.7 Testing Requirements

None

7.3.8 Inspection and Monitoring Requirements

None

7.3.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for each affected tank to demonstrate compliance with Condition 7.3.5 and 7.3.6 pursuant to Section 39.5(7) of the Act:

- a. Design information for the tank showing the presence of a submerged loading pipe or submerged fill;
- b. Maintenance and repair records for the tank, as related to the repair or replacement of the loading pipe;
- c. The throughput of the affected storage tanks, gal/yr; and $% \left(1\right) =\left(1\right) \left(1\right)$
- d. The annual VOM emissions from the affected storage tanks based on the material stored, the tank throughput, and the applicable emission factors and formulas with supporting calculations.

7.3.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of noncompliance of the affected storage tank with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

a. Any loading of gasoline or other VOL into an affected tanks that is not in compliance with Condition 7.3.5, e.g., an inoperative or no "submerged loading pipe or submerged fill" within five days of becoming aware of the noncompliance status. This notification shall include a description of the event, the cause for the noncompliance, actions taken to correct the noncompliance and the steps taken to avoid future noncompliance.

7.3.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.3.12 Compliance Procedures

Compliance with the emission limits in condition 5.5 and 7.3.6 shall be based on the recordkeeping requirements in Condition 7.3.9 and the emission factors and formulas listed below:

For the purpose of estimating VOM emissions from the affected storage tank, the current version 4.09 of the TANKS program is acceptable, or any subsequent program submitted by the Permittee and accepted by Illinois EPA.

7.4 Unit 04: Fugitive Emissions
Control 04: Fugitive Dust Operating Program

7.4.1 Description

Fugitive emissions are defined as those emissions, which would not reasonably pass through a stack, vent or other functionally equivalent opening.

Fugitive or "non-point source" emissions are particulate matter emissions from paved and unpaved roadways; storage piles, loading/unloading activities; materials being transported in a vehicle; materials collected from air pollution control equipment. US Silica has the following potential fugitive emission units: cars on paved and unpaved roads; trucks on paved and unpaved roads; sand handling; storage piles and blasting.

7.4.2 List of Emission Units and Air Pollution Control Equipment

Emission		Emission Control
Unit	Description	Equipment
04	Fugitive PM Emissions	Fugitive Dust
		Operating Program

7.4.3 Applicability Provisions and Applicable Regulations

- a. The "affected fugitive emission sources" for the purpose of these unit-specific conditions are the emission units given in 7.4.2.
- b. The affected fugitive emission sources are subject to the emission limits identified in Condition 5.2.2.
- c. The affected fugitive emission sources are hereby subject to 35 IAC 212.304-212.316 for Fugitive Particulate Matter which states: [T1N]
 - i. All storage piles of materials with uncontrolled emissions of fugitive particulate matter in excess of 45.4 Mg per year (50 T/yr) which are located within a source whose potential particulate emissions from all emission units exceed 90.8 Mg/yr (100 T/yr) shall be protected by a cover or sprayed with a surfactant solution or water on a regular basis, as needed, or treated by an equivalent method, in accordance with the operating program required by Sections 212.309, 212.310 and 212.312 of this Subpart. [35 IAC 212.304 a)] [T1N]
 - ii. Subsection (a) of this Section shall not apply to a specific storage pile if the owner or

operator of that pile proves to the Agency that fugitive particulate emissions from that pile do not cross the property line either by direct wind action or reentrainment. [35 IAC 212.304 b)] [T1N]

- iii. All conveyor loading operations to storage piles specified in Section 212.304 of this Subpart shall utilize spray systems, telescopic chutes, stone ladders or other equivalent methods in accordance with the operating program required by Sections 212.309, 212.310 and 212.312 of this Subpart. [35 IAC 212.305] [T1N]
- iv. All normal traffic pattern access areas surrounding storage piles specified in Section 212.304 of this Subpart and all normal traffic pattern roads and parking facilities which are located on mining or manufacturing property shall be paved or treated with water, oils or chemical dust suppressants. All paved areas shall be cleaned on a regular basis. All areas treated with water, oils or chemical dust suppressants shall have the treatment applied on a regular basis, as needed, in accordance with the operating program required by Sections 212.309, 212.310 and 212.312 of this Subpart. [35 IAC 212.306] [T1N]
- v. All unloading and transporting operations of materials collected by pollution control equipment shall be enclosed or shall utilize spraying, pelletizing, screw conveying or other equivalent methods. [35 IAC 212.307] [T1N]
- vi. Crushers, grinding mills, screening operations, bucket elevators, conveyor transfer points, conveyors, bagging operations, storage bins and fine product truck and railcar loading operations shall be sprayed with water or a surfactant solution, utilize choke-feeding or be treated by an equivalent method in accordance with an operating program. [35 IAC 212.308] [T1N]
- vii. The emission units described in Sections 212.304 through 212.308 and Section 212.316 of this Subpart shall be operated under the provisions of an operating program, consistent with the requirements set forth in Sections 212.310 and 212.312 of this Subpart, and prepared by the owner or operator and

submitted to the Agency for its review. Such operating program shall be designed to significantly reduce fugitive particulate matter emissions.

- A. The amendment to this Section incorporating the applicability of Section 212.316 shall apply by May 11, 1993, or upon initial start-up, whichever occurs later. [35 IAC 212.309] [T1N]
- viii. As a minimum the operating program shall
 include the following:
 - A. The name and address of the source;
 - B. The name and address of the owner or operator responsible for execution of the operating program;
 - C. A map or diagram of the source showing approximate locations of storage piles, conveyor loading operations, normal traffic pattern access areas surrounding storage piles and all normal traffic patterns within the source;
 - D. Location of unloading and transporting operations with pollution control equipment;
 - E. A detailed description of the best management practices utilized to achieve compliance with this Subpart, including an engineering specification of particulate collection equipment, application systems for water, oil, chemicals and dust suppressants utilized and equivalent methods utilized;
 - F. Estimated frequency of application of dust suppressants by location of materials; and
 - G. Such other information as may be necessary to facilitate the Agency's review of the operating program. [35 IAC 212.311] [T1N]
- ix. The operating program shall be amended from time to time by the owner or operator so that the operating program is current. Such amendments shall be consistent with this

- Subpart and shall be submitted to the Agency for its review. [35 IAC 212.312] [T1N]
- x. If particulate collection equipment is operated pursuant to Sections 212.304 through 212.310 and 212.312 of this Subpart, emissions from such equipment shall not exceed 68 mg/dscm (0.03 gr/dscf). [35 IAC 212.313] [T1N]
- Section 212.301 of this Subpart shall not xi. apply and spraying pursuant to Sections 212.304 through 212.310 and 212.312 of this Subpart shall not be required when the wind speed is greater than 40.2 km/hr (25 mph). Determination of wind speed for the purposes of this rule shall be by a one-hour average or hourly recorded value at the nearest official station of the U.S. Weather Bureau or by wind speed instruments operated on the site. In cases where the duration of operations subject to this rule is less than one hour, wind speed may be averaged over the duration of the operations on the basis of on-site wind speed instrument measurements. [35 IAC 212.314] [T1N]
- xii. No person shall cause or allow the operation of a vehicle of the second division as defined by 625 ILCS 5/1-217, or a semi-trailer as defined by 625 ILCS 5/1-187, without a covering sufficient to prevent the release of particulate matter into the atmosphere, provided that this rule shall not pertain to automotive exhaust emissions. [35 IAC 212.315] [T1N]
- 7.4.4 Non-Applicability of Regulations of Concern
 - a. The affected fugitive emission sources of PM are not subject to the requirements of 35 IAC 212.321, Emissions of Particulate Matter from Process Emission Units, because due to the unique nature of this process, such rules cannot reasonably be applied.
- 7.4.5 Operational and Production Limits and Work Practices

None

7.4.6 Emission Limitations

None

7.4.7 Testing Requirements

None

7.4.8 Inspection Requirements

None

7.4.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected fugitive emission sources to demonstrate compliance with Conditions 5.5.1 and 7.4.3.

The Permittee shall keep a log of all control measures applied.

7.4.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of deviations of the affected fugitive emission source with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken.

7.4.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.4.12 Compliance Procedures

Compliance with the limits in Conditions 5.5.1 shall be based on the recordkeeping requirements in Condition 7.4.9 and the emission factors listed below:

a. To determine compliance with Conditions 5.5.1, 7.4.3 and 7.4.6, PM emissions from the affected fugitive emission sources shall be calculated based on the applicable emission factors for Fugitive dust sources, Section 13.2, AP-42, Volume I, Fifth Edition, Supplement D, January, 1995.

8.0 GENERAL PERMIT CONDITIONS

8.1 Permit Shield

Pursuant to Section 39.5(7)(j) of the Act, the Permittee has requested and has been granted a permit shield. This permit shield provides that compliance with the conditions of this permit shall be deemed compliance with applicable requirements which were applicable as of the date the proposed permit for this source was issued, provided that either the applicable requirements are specifically identified within this permit, or the Illinois EPA, in acting on this permit application, has determined that other requirements specifically identified are not applicable to this source and this determination (or a concise summary thereof) is included in this permit.

This permit shield does not extend to applicable requirements which are promulgated after May 19, 2003 (the date of issuance of the draft permit) unless this permit has been modified to reflect such new requirements.

8.2 Applicability of Title IV Requirements (Acid Deposition Control)

This source is not an affected source under Title IV of the CAA and is not subject to requirements pursuant to Title IV of the CAA.

8.3 Emissions Trading Programs

As of the date of issuance of this permit, there are no such economic incentive, marketable permit or emission trading programs that have been approved by USEPA.

- 8.4 Operational Flexibility/Anticipated Operating Scenarios
 - 8.4.1 Changes Specifically Addressed by Permit

Physical or operational changes specifically addressed by the Conditions of this permit that have been identified as not requiring Illinois EPA notification may be implemented without prior notice to the Illinois EPA.

8.4.2 Changes Requiring Prior Notification

The Permittee is authorized to make physical or operational changes that contravene express permit terms without applying for or obtaining an amendment to this permit, provided that [Section 39.5(12)(a)(i) of the Act]:

- a. The changes do not violate applicable requirements;
- b. The changes do not contravene federally enforceable permit terms or conditions that are monitoring

(including test methods), recordkeeping, reporting, or compliance certification requirements;

- c. The changes do not constitute a modification under Title I of the CAA;
- d. Emissions will not exceed the emissions allowed under this permit following implementation of the physical or operational change; and
- e. The Permittee provides written notice to the Illinois EPA, Division of Air Pollution Control, Permit Section, at least 7 days before commencement of the change. This notice shall:
 - i. Describe the physical or operational change;
 - ii. Identify the schedule for implementing the physical or operational change;
 - iii. Provide a statement of whether or not any New Source Performance Standard (NSPS) is applicable to the physical or operational change and the reason why the NSPS does or does not apply;
 - iv. Provide emission calculations which demonstrate that the physical or operational change will not result in a modification; and
 - v. Provide a certification that the physical or operational change will not result in emissions greater than authorized under the Conditions of this permit.

8.5 Testing Procedures

Tests conducted to measure composition of materials, efficiency of pollution control devices, emissions from process or control equipment, or other parameters shall be conducted using standard test methods. Documentation of the test date, conditions, methodologies, calculations, and test results shall be retained pursuant to the recordkeeping procedures of this permit. Reports of any tests conducted as required by this permit or as the result of a request by the Illinois EPA shall be submitted as specified in Condition 8.6.

8.6 Reporting Requirements

8.6.1 Monitoring Reports

If monitoring is required by any applicable requirements or conditions of this permit, a report summarizing the required monitoring results, as specified in the

conditions of this permit, shall be submitted to the Air Compliance Section of the Illinois EPA every six months as follows [Section 39.5(7)(f) of the Act]:

Monitoring Period

Report Due Date

January - June

September 1

July - December

March 1

All instances of deviations from permit requirements must be clearly identified in such reports. All such reports shall be certified in accordance with Condition 9.9.

8.6.2 Test Notifications

Unless otherwise specified elsewhere in this permit, a written test plan for any test required by this permit shall be submitted to the Illinois EPA for review at least 60 days prior to the testing pursuant to Section 39.5(7)(a) of the Act. The notification shall include at a minimum:

- a. The name and identification of the affected unit(s);
- b. The person(s) who will be performing sampling and analysis and their experience with similar tests;
- c. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of maximum emissions and the means by which the operating parameters for the source and any control equipment will be determined;
- d. The specific determination of emissions and operation which are intended to be made, including sampling and monitoring locations;
- e. The test method(s) which will be used, with the specific analysis method, if the method can be used with different analysis methods;
- f. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification; and
- g. Any proposed use of an alternative test method, with detailed justification.

8.6.3 Test Reports

Unless otherwise specified elsewhere in this permit, the results of any test required by this permit shall be

submitted to the Illinois EPA within 60 days of completion of the testing. The test report shall include at a minimum [Section 39.5(7)(e)(i) of the Act]:

- a. The name and identification of the affected unit(s);
- b. The date and time of the sampling or measurements;
- c. The date any analyses were performed;
- d. The name of the company that performed the tests and/or analyses;
- e. The test and analytical methodologies used;
- f. The results of the tests including raw data, and/or analyses including sample calculations;
- g. The operating conditions at the time of the sampling or measurements; and
- h. The name of any relevant observers present including the testing company's representatives, any Illinois EPA or USEPA representatives, and the representatives of the source.

8.6.4 Reporting Addresses

- a. The following addresses should be utilized for the submittal of reports, notifications, and renewals:
 - i. Illinois EPA Air Compliance Section

Illinois Environmental Protection Agency Bureau of Air Compliance Section (MC 40) P.O. Box 19276 Springfield, Illinois 62794-9276

ii. Illinois EPA - Air Regional Field Office

Illinois Environmental Protection Agency Division of Air Pollution Control 5415 North University Peoria, Illinois 61614

iii. Illinois EPA - Air Permit Section

Illinois Environmental Protection Agency Division of Air Pollution Control Permit Section (MC 11) P.O. Box 19506 Springfield, Illinois 62794-9506 iv. USEPA Region 5 - Air Branch

USEPA (AE - 17J)
Air & Radiation Division
77 West Jackson Boulevard
Chicago, Illinois 60604

- b. Unless otherwise specified in the particular provision of this permit, reports shall be sent to the Illinois EPA - Air Compliance Section with a copy sent to the Illinois EPA - Air Regional Field Office.
- 8.7 Obligation to Comply with Title I Requirements

Any term, condition, or requirement identified in this permit by T1, T1R, or T1N is established or revised pursuant to 35 IAC Part 203 or 40 CFR 52.21 ("Title I provisions") and incorporated into this permit pursuant to both Section 39.5 and Title I provisions. Notwithstanding the expiration date on the first page of this permit, the Title I conditions remain in effect pursuant to Title I provisions until the Illinois EPA deletes or revises them in accordance with Title I procedures.

9.0 STANDARD PERMIT CONDITIONS

9.1 Effect of Permit

- 9.1.1 The issuance of this permit does not release the Permittee from compliance with State and Federal regulations which are part of the Illinois State Implementation Plan, as well as with other applicable statutes and regulations of the United States or the State of Illinois or applicable ordinances, except as specifically stated in this permit and as allowed by law and rule [Section 39.5(7)(j)(iv) of the Act].
- 9.1.2 In particular, this permit does not alter or affect the following:
 - a. The provisions of Section 303 (emergency powers) of the CAA, including USEPA's authority under that Section;
 - b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
 - c. The applicable requirements of the acid rain program consistent with Section 408(a) of the CAA; and
 - d. The ability of USEPA to obtain information from a source pursuant to Section 114 (inspections, monitoring, and entry) of the CAA.
- 9.1.3 Notwithstanding the conditions of this permit specifying compliance practices for applicable requirements, any person (including the Permittee) may also use other credible evidence to establish compliance or noncompliance with applicable requirements.

9.2 General Obligations of Permittee

9.2.1 Duty to Comply

The Permittee must comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the CAA and the Act, and is grounds for any or all of the following: enforcement action, permit termination, revocation and reissuance, modification, or denial of a permit renewal application [Section 39.5(7)(o)(i) of the Act].

The Permittee shall meet applicable requirements that become effective during the permit term in a timely manner unless an alternate schedule for compliance with the applicable requirement is established.

9.2.2 Duty to Maintain Equipment

The Permittee shall maintain all equipment covered under this permit in such a manner that the performance or operation of such equipment shall not cause a violation of applicable requirements.

9.2.3 Duty to Cease Operation

No person shall cause, threaten or allow the continued operation of any emission unit during malfunction or breakdown of the emission unit or related air pollution control equipment if such operation would cause a violation of an applicable emission standard, regulatory requirement, ambient air quality standard or permit limitation unless such malfunction or breakdown is allowed by a permit condition [Section 39.5(6)(c) of the Act].

9.2.4 Disposal Operations

The source shall be operated in such a manner that the disposal of air contaminants collected by the equipment operations, or activities shall not cause a violation of the Act or regulations promulgated thereunder.

9.2.5 Duty to Pay Fees

The Permittee must pay fees to the Illinois EPA consistent with the fee schedule approved pursuant to Section 39.5(18) of the Act, and submit any information relevant thereto [Section 39.5(7)(o)(vi) of the Act]. The check should be payable to "Treasurer, State of Illinois" and sent to: Fiscal Services Section, Illinois Environmental Protection Agency, P.O. Box 19276, Springfield, Illinois 62794-9276.

9.3 Obligation to Allow Illinois EPA Surveillance

Upon presentation of proper credentials and other documents, the Permittee shall allow the Illinois EPA, or an authorized representative to perform the following [Section 39.5(7)(a) and (p)(ii) of the Act and 415 ILCS 5/4]:

- a. Enter upon the Permittee's premises where an actual or potential emission unit is located; where any regulated equipment, operation, or activity is located or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect during hours of operation any sources, equipment (including monitoring and air pollution control

equipment), practices, or operations regulated or required under this permit;

- d. Sample or monitor any substances or parameters at any location:
 - At reasonable times, for the purposes of assuring permit compliance; or
 - ii. As otherwise authorized by the CAA, or the Act.
- e. Obtain and remove samples of any discharge or emission of pollutants authorized by this permit; and
- f. Enter and utilize any photographic, recording, testing, monitoring, or other equipment for the purposes of preserving, testing, monitoring, or recording any activity, discharge or emission at the source authorized by this permit.
- 9.4 Obligation to Comply with Other Requirements

The issuance of this permit does not release the Permittee from applicable State and Federal laws and regulations, and applicable local ordinances addressing subjects other than air pollution control.

9.5 Liability

9.5.1 Title

This permit shall not be considered as in any manner affecting the title of the premises upon which the permitted source is located.

9.5.2 Liability of Permittee

This permit does not release the Permittee from any liability for damage to person or property caused by or resulting from the construction, maintenance, or operation of the sources.

9.5.3 Structural Stability

This permit does not take into consideration or attest to the structural stability of any unit or part of the source.

9.5.4 Illinois EPA Liability

This permit in no manner implies or suggests that the Illinois EPA (or its officers, agents or employees) assumes any liability, directly or indirectly, for any

loss due to damage, installation, maintenance, or operation of the source.

9.5.5 Property Rights

This permit does not convey any property rights of any sort, or any exclusive privilege [Section 39.5(7)(o)(iv) of the Act].

9.6 Recordkeeping

9.6.1 Control Equipment Maintenance Records

A maintenance record shall be kept on the premises for each item of air pollution control equipment. As a minimum, this record shall show the dates of performance and nature of preventative maintenance activities.

9.6.2 Records of Changes in Operation

A record shall be kept describing changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under this permit, and the emissions resulting from those changes [Section 39.5(12)(b)(iv) of the Act].

9.6.3 Retention of Records

- a. Records of all monitoring data and support information shall be retained for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit [Section 39.5(7)(e)(ii) of the Act].
- b. Other records required by this permit shall be retained for a period of at least 5 years from the date of entry unless a longer period is specified by a particular permit provision.

9.7 Annual Emissions Report

The Permittee shall submit an annual emissions report to the Illinois EPA, Compliance Section no later than May 1 of the following year, as required by 35 IAC Part 254.

9.8 Requirements for Compliance Certification

Pursuant to Section 39.5(7)(p)(v) of the Act, the Permittee shall submit annual compliance certifications. The compliance

certifications shall be submitted no later than May 1 or more frequently as specified in the applicable requirements or by permit condition. The compliance certifications shall be submitted to the Air Compliance Section, Air Regional Field Office, and USEPA Region 5 - Air Branch. The addresses for the submittal of the compliance certifications are provided in Condition 8.6.4 of this permit.

- a. The certification shall include the identification of each term or condition of this permit that is the basis of the certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, both currently and over the reporting period consistent with the conditions of this permit.
- b. All compliance certifications shall be submitted to USEPA Region 5 in Chicago as well as to the Illinois EPA.
- c. All compliance reports required to be submitted shall include a certification in accordance with Condition 9.9.

9.9 Certification

Any document (including reports) required to be submitted by this permit shall contain a certification by a responsible official of the Permittee that meets the requirements of Section 39.5(5) of the Act [Section 39.5(7)(p)(i) of the Act]. An example Certification by a Responsible Official is included as an attachment to this permit.

9.10 Defense to Enforcement Actions

9.10.1 Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit [Section 39.5(7)(o)(ii) of the Act].

9.10.2 Emergency Provision

- a. An emergency shall be an affirmative defense to an action brought for noncompliance with the technologybased emission limitations under this permit if the following conditions are met through properly signed, contemporaneous operating logs, or other relevant evidence:
 - i. An emergency occurred as provided in Section 39.5(7)(k) of the Act and the Permittee can identify the cause(s) of the emergency.

Normally, an act of God such as lightning or flood is considered an emergency;

- ii. The permitted source was at the time being properly operated;
- iii. The Permittee submitted notice of the emergency to the Illinois EPA within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken; and
- iv. During the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission limitations, standards, or regulations in this permit.
- b. This provision is in addition to any emergency or upset provision contained in any applicable requirement. This provision does not relieve a Permittee of any reporting obligations under existing federal or state laws or regulations.

9.11 Permanent Shutdown

This permit only covers emission units and control equipment while physically present at the indicated source location(s). Unless this permit specifically provides for equipment relocation, this permit is void for the operation or activity of any item of equipment on the date it is removed from the permitted location(s) or permanently shut down. This permit expires if all equipment is removed from the permitted location(s), notwithstanding the expiration date specified on this permit.

9.12 Reopening and Reissuing Permit for Cause

9.12.1 Permit Actions

This permit may be modified, reopened, and reissued, for cause pursuant to Section 39.5(15) of the Act. The filing of a request by the Permittee for a permit modification, revocation, and reissuance, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition [Section 39.5(7)(o)(iii) of the Act].

9.12.2 Reopening and Revision

This permit must be reopened and revised if any of the following occur [Section 39.5(15)(a) of the Act]:

- a. Additional requirements become applicable to the equipment covered by this permit and three or more years remain before expiration of this permit;
- b. Additional requirements become applicable to an affected source for acid deposition under the acid rain program;
- c. The Illinois EPA or USEPA determines that this permit contains a material mistake or inaccurate statement when establishing the emission standards or limitations, or other terms or conditions of this permit; and
- d. The Illinois EPA or USEPA determines that this permit must be revised to ensure compliance with the applicable requirements of the Act.

9.12.3 Inaccurate Application

The Illinois EPA has issued this permit based upon the information submitted by the Permittee in the permit application. Any misinformation, false statement or misrepresentation in the application shall be grounds for revocation under Section 39.5(15)(b) of the Act.

9.12.4 Duty to Provide Information

The Permittee shall furnish to the Illinois EPA, within a reasonable time specified by the Illinois EPA any information that the Illinois EPA may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to the Illinois EPA copies of records required to be kept by this permit, or for information claimed to be confidential, the Permittee may furnish such records directly to USEPA along with a claim of confidentiality [Section 39.5(7)(o)(v) of the Act].

9.13 Severability Clause

The provisions of this permit are severable, and should any one or more be determined to be illegal or unenforceable, the validity of the other provisions shall not be affected. The rights and obligations of the Permittee shall be construed and enforced as if this permit did not contain the particular provisions held to be invalid and the applicable requirements

underlying these provisions shall remain in force [Section 39.5(7) (i) of the Act].

9.14 Permit Expiration and Renewal

The right to operate terminates on the expiration date unless the Permittee has submitted a timely and complete renewal application. For a renewal to be timely it must be submitted no later than 9 and no sooner than 12 months prior to expiration. The equipment may continue to operate during the renewal period until final action is taken by the Illinois EPA, in accordance with the original permit conditions [Section 39.5(5)(1), (n), and (o) of the Act].

10.0 ATTACHMENTS

10.1 Attachment 1 Example Certification by a Responsible Official

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature:	
Name:	
Official Title:	
Telephone No.:	
Date Signed:	

10.2 Attachment 2 Guidance on Revising This Permit

The Permittee must submit an application to the Illinois EPA using the appropriate revision classification in accordance with Sections 39.5(13) and (14) of the Act and 35 IAC 270.302. Specifically, there are currently three classifications for revisions to a CAAPP permit. These are:

- 1. Administrative Permit Amendment;
- 2. Minor Permit Modification; and
- 3. Significant Permit Modification.

The Permittee must determine, request, and submit the necessary information to allow the Illinois EPA to use the appropriate procedure to revise the CAAPP permit. A brief explanation of each of these classifications follows.

1. Administrative Permit Amendment

- Corrects typographical errors;
- Identifies a change in the name, address, or phone number of any person identified in the permit, or provides a similar minor administrative change at the source;
- Requires more frequent monitoring or reporting by the Permittee;
- Allows for a change in ownership or operational control of the source where no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new Permittees has been submitted to the Illinois EPA. This shall be handled by completing form 272-CAAPP, REQUEST FOR OWNERSHIP CHANGE FOR CAAPP PERMIT; or
- Incorporates into the CAAPP permit a construction permit, provided the conditions of the construction permit meet the requirements for the issuance of CAAPP permits.

2. Minor Permit Modification

- Do not violate any applicable requirement;
- Do not involve significant changes to existing monitoring, reporting, or recordkeeping requirements in the permit;

- Do not require a case-by-case determination of an emission limitation or other standard, or a source-specific determination of ambient impacts, or a visibility or increment analysis;
- Do not seek to establish or change a permit term or condition for which there is no corresponding underlying requirement and which avoids an applicable requirement to which the source would otherwise be subject. Such terms and conditions include:
 - A federally enforceable emissions cap assumed to avoid classification as a modification under any provision of Title I of the CAA; and
 - An alternative emissions limit approved pursuant to regulations promulgated under Section 112(i)(5) of the CAA.
- Are not modifications under any provision of Title I of the CAA;
- Are not required to be processed as a significant permit modification; and
- Modifications involving the use of economic incentives, marketable permits, emissions trading, and other similar approaches.

An application for a minor permit modification shall include the following:

- A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;
- The source's suggested draft permit/conditions;
- Certification by a responsible official that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used; and
- Information as contained on form 271-CAAPP, MINOR PERMIT MODIFICATION FOR CAAPP PERMIT for the Illinois EPA to use to notify USEPA and affected States.

3. Significant Permit Modification

- Applications that do not qualify as either minor permit modifications or as administrative permit amendments;
- Applications requesting a significant change in existing monitoring permit terms or conditions;
- Applications requesting a relaxation of reporting or recordkeeping requirements; and
- Cases in which, in the judgment of the Illinois EPA, action on an application for modification would require decisions to be made on technically complex issues.

An application for a significant permit modification shall include the following:

• A detailed description of the proposed change(s), including all physical changes to equipment, changes in the method of operation, changes in emissions of each pollutant, and any new applicable requirements which will apply as a result of the proposed change. Note that the Permittee need only submit revised forms for equipment and operations that will be modified.

The Illinois EPA requires the information on the following appropriate forms to be submitted in accordance with the proper classification:

- Form 273-CAAPP, REQUEST FOR ADMINISTRATIVE PERMIT AMENDMENT FOR CAAPP PERMIT; or
- Form 271-CAAPP, MINOR PERMIT MODIFICATION FOR CAAPP PERMIT; or
- Form 200-CAAPP, APPLICATION FOR CAAPP PERMIT (for significant modification).

Application forms can be obtained from the Illinois EPA website at http://www.epa.state.il.us/air/forms.

Note that the request to revise the permit must be certified for truth, accuracy, and completeness by a responsible official.

Note that failure to submit the required information may require the Illinois EPA to deny the application. The Illinois EPA reserves the right to require that additional information be submitted as needed to evaluate or take final action on applications pursuant to Section 39.5(5)(g) of the Act and 35 IAC 270.305.



Illinois Environmental Protection Agency
Division Of Air Pollution Control -- Permit Section
P.O. Box 19506
Springfield, Illinois 62794-9506

Application For Construction Permit (For CAAPP Sources Only)		For Illinois EPA use only		
		ID number:		
		Permit number:		
	r offine (r of ozzar r oddrocs omy)		Date received:	
	orm is to be used by CAAPP sources sary information and completed CAA			n a construction permit. Please attach other
TICCCS	sary information and completed OAA		nformation	mication project.
1.	Source name:			
2.	Source street address:			
3.	City:			4. Zip code:
5.	i. Is the source located within city limits?		☐ Yes ☐ No	
6.	Township name:	7. County:		8. ID number:
<u> </u>				
		Owner Ir	formation	
9.	Name:			
10.	Address:			
11.	City:	12. State:		13. Zip code:
<u> </u>				
	Operator	Information	(if different fr	om owner)
14.	Name			
15.	Address:			
16.	City:	17. State:		18. Zip code:
	Applicant Information			
19.	19. Who is the applicant?			
21. Attention name and/or title for written correspondence:				
22.	Technical contact person for	echnical contact person for application: 23. Contact person's telephone number:		

This Agency is authorized to require and you must disclose this information under 415 ILCS 5/39. Failure to do so could result in the application being denied and penalties under 415 ILCS 5 et seq. It is not necessary to use this form in providing this information. This form has been approved by the forms management center.

	Summary Of Application Contents	
const	the application address whether the proposed project would itute a new major source or major modification under each of the	☐ Yes ☐ No
a) N b) F c) H	ving programs: Ion-attainment New Source Review – 35 IAC Part 203; Prevention of Significant Deterioration (PSD) – 40 CFR 52.21; Iazardous Air Pollutants: Regulations Governing Constructed or Reconstructed Major Sources – 40 CFR Part 63?	
25. Does stand a) E b) F c) F	the application identify and address all applicable emissions lards, including those found in the following: coard Emission Standards – 35 IAC Chapter I, Subtitle B; dederal New Source Performance Standards – 40 CFR Part 60; dederal Standards for Hazardous Air Pollutants – 40 CFR Parts 61 and 63?	☐ Yes ☐ No
emiss	the application include a process flow diagram(s) showing all sion units and control equipment, and their relationship, for which a it is being sought?	☐ Yes ☐ No
	the application include a complete process description for the sion units and control equipment for which a permit is being sought?	☐ Yes ☐ No
CAAI equip from any c Note:	the application include the information as contained in completed PP forms for all appropriate emission units and air pollution control ment, listing all applicable requirements and proposed exemptions otherwise applicable requirements, and identifying and describing outstanding legal actions by either the USEPA or the Illinois EPA? The use of "APC" application forms is not appropriate for applications for CAAPP sources. CAAPP forms should be used to supply information.	☐ Yes ☐ No
inforr copie	application contains TRADE SECRET information, has such nation been properly marked and claimed, and have two separate s of the application suitable for public inspection and notice been litted, in accordance with applicable rules and regulations?	☐ Yes ☐ No ☐ Not Applicable, No TRADE SECRET information in this application
Note 1: Answering "No" to any of the above may result in the application being deemed incomplete.		
Signature Block		
certif	certification must be signed by a responsible official. Applications wit cation will be returned as incomplete.	
inquii comp	ify under penalty of law that, based on information and belief formed ary, the statements and information contained in this application are trulete. Orized Signature:	

Note 2: An operating permit for the construction/modification permitted in a construction permit must be obtained by applying for the appropriate revision to the source's CAAPP permit, if necessary.

AUTHORIZED SIGNATURE

TYPED OR PRINTED NAME OF SIGNATORY

TITLE OF SIGNATORY

10.4 Attachment 4 Guidance on Renewing This Permit

Timeliness - Pursuant to Section 39.5(5)(n) of the Act and 35 IAC 270.301(d), a source must submit to the Illinois EPA a complete CAAPP application for the renewal of a CAAPP permit not later than 9 months before the date of permit expiration of the existing CAAPP permit in order for the submittal to be deemed timely. Note that the Illinois EPA typically sends out renewal notices approximately 18 months prior to the expiration of the CAAPP permit.

The CAAPP application must provide all of the following information in order for the renewal CAAPP application to be deemed complete by the Illinois EPA:

- A completed renewal application form 200-CAAPP, APPLICATION FOR CAAPP PERMIT.
- 2. A completed compliance plan form 293-CAAPP, COMPLIANCE PLAN/SCHEDULE OF COMPLIANCE FOR CAAPP PERMIT.
- A completed compliance certification form 296-CAAPP, COMPLIANCE CERTIFICATION, signed by the responsible official.
- 4. Any applicable requirements that became effective during the term of the permit and that were not included in the permit as a reopening or permit revision.
- 5. If this is the first time this permit is being renewed and this source has not yet addressed CAM, the application should contain the information on form 464-CAAPP, COMPLIANCE ASSURANCE MONITORING (CAM) PLAN.
- 6. Information addressing any outstanding transfer agreement pursuant to the ERMS.
- 7. a. If operations of an emission unit or group of emission units remain unchanged and are accurately depicted in previous submittals, the application may contain a letter signed by a responsible official that requests incorporation by reference of existing information previously submitted and on file with the Illinois EPA. This letter must also include a statement that information incorporated by reference is also being certified for truth and accuracy by the responsible official's signing of the form 200-CAAPP, APPLICATION FOR CAAPP PERMIT and the form 296-CAAPP, COMPLIANCE CERTIFICATION. The boxes should be marked yes on form 200-CAAPP, APPLICATION FOR CAAPP PERMIT,

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as existing information is being incorporated by reference.

- b. If portions of current operations are not as described in previous submittals, then in addition to the information above for operations that remain unchanged, the application must contain the necessary information on all changes, e.g., discussion of changes, new or revised CAAPP forms, and a revised fee form 292-CAAPP, FEE DETERMINATION FOR CAAPP PERMIT, if necessary.
- 8. Information about all off-permit changes that were not prohibited or addressed by the permit to occur without a permit revision and the information must be sufficient to identify all applicable requirements, including monitoring, recordkeeping, and reporting requirements, for such changes.
- 9. Information about all changes made under 40 CFR 70.4(b)(12)(i) and (ii) that require a 7-day notification prior to the change without requiring a permit revision.

The Illinois EPA will review all applications for completeness and timeliness. If the renewal application is deemed both timely and complete, the source shall continue to operate in accordance with the terms and conditions of its CAAPP permit until final action is taken on the renewal application.

Notwithstanding the completeness determination, the Illinois EPA may request additional information necessary to evaluate or take final action on the CAAPP renewal application. If such additional information affects your allowable emission limits, a revised form 292-CAAPP, FEE DETERMINATION FOR CAAPP PERMIT must be submitted with the requested information. The failure to submit to the Illinois EPA the requested information within the time frame specified by the Illinois EPA, may force the Illinois EPA to deny your CAAPP renewal application pursuant to Section 39.5 of the Act.

Application forms may be obtained from the Illinois EPA website at http://www.epa.state.il.us/air/forms.html.

If you have any questions regarding this matter, please contact a permit analyst at 217/782-2113.

Mail renewal applications to:

Illinois Environmental Protection Agency Division of Air Pollution Control

Printed on Recycled Paper 199-CAAPP Page 2 of 2

Permit Section (MC 11)
P.O. Box 19506
Springfield, Illinois 62794-9506

JNK:LAK:psj